

30TH MEETING
OF THE
NATIONAL BIOETHICS ADVISORY COMMISSION

RELIGIOUS VIEWS ON RESEARCH
INVOLVING HUMAN EMBRYONIC STEM CELLS

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P R O C E E D I N G S

OPENING REMARKS

(Technical problems and opening remarks not herein transcribed.)

DR. MESLIN: -- for allowing Georgetown to host an NBAC meeting.

DR. CHILDRESS: Let me second the gratitude to Georgetown and thanks to all those involved. I understand that President O'Donovan may stop by early this afternoon to send his welcome to the group.

Let's start and just introduce ourselves.

Arturo Brito is a member of the commission.

DR. BRITO: Arturo Brito. I am a pediatrician and work at the University of Miami.

DR. WILDES: Kevin Wildes, Department of Philosophy in the Kennedy Institute of Ethics here at Georgetown University.

DR. PELLEGRINO: I am Ed Pellegrino. I am Professor of Medicine and Director of the Center for clinical Bioethics here at Georgetown.

DR. FARLEY: I am Margaret Farley. I am Professor of Christian Ethics at Yale University Graduate School and Divinity School.

RABBI DORFF: I am Elliot Dorff. I am a Conservative Rabbi and Professor of Philosophy at the University of Judaism in Los Angeles.

DR. ZOLOTH: I am Laurie Zoloth. I am Chair of Jewish Studies at San Francisco State University.

FATHER DEMOPULOS: Demetrios Demopulos. I am a simple village priest in a Greek Orthodox church in Massachusetts who studied genetics some time ago and gets called to do these things.

DR. CHILDRESS: Let's just back up for a moment. Rabbi Tendler?

Excuse me, Rabbi Tendler. Would you introduce yourself?

RABBI TENDLER: Moshe Tendler. One of the most important things is I have eight children, thank God, and as of yesterday 52 grandchildren.

(Laughter.)

RABBI TENDLER: That is an important thing. I serve as Professor of Talmud at Yeshiva University and its affiliate known as Rabbi Isaac Eickhanan Theological Seminary. I chair the Biology Department of the Undergraduates and I am a University Professor of Medical Ethics.

DR. CHILDRESS: Thank you.

DR. MEILANDER: Gil Meilander. I teach ethics at Valparaiso University.

DR. COLE-TURNER: Ronald Cole-Turner. I teach theology and ethics at Pittsburgh Theological Seminary.

DR. CASSELL: I am Eric Cassell and I am a physician and a member of the commission.

DR. MESLIN: I am Eric Meslin and I am the Executive Director. You will notice that there are microphones on the table. I am sure our audio person will help us a little bit but I think you have to speak clearly and we will try and reduce the feedback.

DR. CHILDRESS: Aziz, would you introduce yourself?

DR. SACHEDINA: Yes. I am Abdulaziz Sachedina from the University of Virginia. I represent Islamic tradition.

DR. CHILDRESS: Jim Childress, University of Virginia, and a member of the commission.

All right. Let's start, Kevin?

CATHOLICISM

KEVIN W. WILDES, S.J., Ph.D., GEORGETOWN UNIVERSITY

DR. WILDES: Thank you. Well, since we are in the -- using a school motif I will report that my paper is not done yet.

(Laughter.)

And I would like to just make -- keeping within the time limits -- make a few general remarks.

First of all, I want to thank the commission for coming and, especially as a member of the faculty here, welcome you. It is an honor to have you all here today. It is especially true because I think Georgetown

was founded in large part to measure -- to foster dialogue between legal debate and civil society so it seems appropriate that you should be here today.

In my testimony I would like to develop -- identify a couple of important things that I think are central to the Roman Catholic community's view on stem cell research that involves human embryos. A crucial issue is the source of the stem cells themselves and, secondly, I would like to just identify and at least mention an issue which I think comes out of the question of the whole area of social justice in regards to this kind of research.

You already received testimony which I think clearly talks about the Catholic Bishops of the United States and their opposition to this type of research and basically the opposition is based on the need for such stem cell research to destroy human embryos. Such destruction is more problematic since the Bishop's work from an assumption that the human embryo ought to be treated as a human person. If one begins, I think, with

this assumption then much of our commonly held views on the research ethics come into play for research ethics are grounded in an understanding of respect for persons and the view that consent of the research subject is essential and to the moral appropriateness of any research.

Furthermore, any research to be undertaken ought to minimize risks and harms to the research subjects and in this type of research, which is involving human -- deriving human stem cells, there's neither the possibility of consent nor is there -- and there is the assurance of the harm to the embryos in that they must be destroyed.

So the use of embryos within the tradition, whether they be spare embryos or whether they be embryos created for research, is a moral road block for many in the Roman Catholic tradition since it involves the destruction of human life for the sake of the research.

Now while the status of the embryo is clear in the hierarchies of statements about this type of

research, it is a matter that is far from settled in our own society as you all know. We are a society that is, I think, deeply divided on the moral standing of early human life. Recently Glen McGee and Art Caplan have noted in an essay that embryonic and germ cell status is not a scientific matter. There is neither a consensus nor is there -- are there facts from which we can deduce the social meaning of different embryonic and fetal tissues and what they are.

Another possibility for obtaining the stem cells, of course, is to use tissue from other forms of fetal tissue. Of course, this leads to an immediate problem in the Roman Catholic tradition if the tissue is from an aborted fetus since in such a situation it puts the research and the researcher in a compromised position. And here we can look at the traditional language and concepts surrounding cooperation with evil and complicity to describe such situations.

Since abortions, in this view, are the destruction of human life, one cannot profit from the

evil or immoral actions of others. And, indeed, this has been the position that has been held on the use of fetal tissue in research and experimentation.

One avenue might be the use of fetal tissue from spontaneous abortions or as a source for stem cell research. However, I am led to believe or to think, I should say, that such tissues have not proven to be good sources for this type of research. But the latter point leads me to be clear about something that could be easily lost and that is that I do not think that one can argue that there is in Roman Catholic law and in principle opposition to stem cell research itself.

It strikes me that the crucial moral issues are the derivation of the stem cells that are to be used in the research. The destruction of the embryos or the use of fetal tissue from abortion are the key moral problems. So if there was a way to somehow do the stem cell research without the destruction, if you would like, either embryonic or fetal, I do not think there would be an in principle opposition within the tradition.

Indeed, I would point out in his testimony before you all, Richard Doerflinger closed his testimony before the commission by saying that the commission should urge NIH to devote its funds to stem cell techniques and other promising avenues of research that in no way depend upon such killing.

Secondly, I would like to just briefly mention an area of concern that would come, I think, out of the Roman Catholic moral tradition when we are looking at questions like this and it is that questions like this cannot be looked at in isolation, that there is a need to situate such questions in the larger social context of what it is to have a just society.

If we are to go ahead with this type of research we need to ask questions about what type of review and oversight would there be for such kind of research and experimentation. And, furthermore, one might ask questions about justice in devoting resources, especially national resources, to such research when

there are so many other basic medical and health care needs that are not currently met in our society.

Issues of social justice and distributive justice are not easy for Americans to deal with and discuss but nevertheless I would argue that the Roman Catholic tradition would say that such questions need to be part of any discussion about how we organize our medical research and delivery.

Thank you.

DR. CHILDRESS: Thanks very much, Kevin.
Ed?

Let's just see if there are any questions from commissioners first that are directed just to clarification of this presentation. If there are, we will do that after each presentation but then the discussion of substance will come after all three have presented.

Okay, Ed.

EDMUND D. PELLEGRINO, M.D., GEORGETOWN UNIVERSITY

DR. PELLEGRINO: Well, Jim, like Kevin and my other colleagues, we welcome you to Georgetown and I appreciate the opportunity, also, to appear before this group to present a Catholic perspective on the question of the stem cell research.

You have heard an official position from Mr. Doerflinger in his April 16th presentation, which I have read and with which I concur. I want to argue against the moral acceptability of research involving embryonic stem cells obtained from intravenous fertilized -- excuse me, in vitro fertilized blastocysts and embryonic primordial germ cell lines obtained from aborted fetuses.

My objections are grounded in what I take to be the teachings of the Roman Catholic church about the moral status of the embryo; second, the insufficiency of the utilitarian arguments which would justify destruction or discarding of embryos; and, third, the practical difficulties of effectively regulating practices even if they were morally defensible.

I recognize, as do Roman Catholics generally, the great potential for human therapeutics in stem cells. I do not oppose stem cell research per se. If the cells were obtained from adult humans, miscarriages, placental blood or other sources. What is morally unsustainable is the harvesting of stem cells by either of two currently proposed methods.

First, the creation and destruction of human embryos at the blastocyst stage by removal of the inner cell mass with the death of the embryo; and, two, the harvesting of primordial germ cells from aborted fetuses. Both cases involve complicity in the direct interruption of the human life which I take to be as a Roman Catholic a moral -- a violation of a moral claim to protection. In both cases a living member of the human species is intentionally terminated.

On the Roman Catholic view, which I will represent, human life is a continuum from the one cell stage to death. At every stage human life has dignity and merits protection. Upon conception, the biological

and ontological individuality of a human being is established. Human development unfolds in an orderly way, and each stage of that development must be treated as an end in itself, and not as a mere means to other ends however useful they might be.

The Roman Catholic perspective I am representing, therefore, rejects the idea that full moral status is conferred by degrees or at some arbitrary point in development. such arbitrariness is label to definition more in accord with experimental need than biological reality. Terms like "pre-embryo" or "pre-implantation embryo" seem to me to be artful contrivances rather than biological or ontological realities.

Also rejected are the socially constructed models which leave moral status to definition by social convention. On this view, moral status may be conferred at different times, or taken away, depending on social norms. This is a particularly perilous model for the most vulnerable among us, the fetus, the embryo, the mentally retarded, and those in permanent vegetative

states. We need only recall the horrors of genocide to recognize how distorted social convention can become even in presumably civilized societies.

There is a difference in moral gravity in harvesting cells from aborted fetuses if the act of terminating life is clearly separated from the use of the harvested cells. The moral problem becomes that of complicity then in an act which Roman Catholics believe to be intrinsically wrong -- namely, abortion. To use tissue from an aborted fetus is morally akin to receiving stolen goods or using the data from enforced human experimentation. In any case, both the fetus and the embryo have the same moral claim to protection even though the moral gravity of use of their respective tissues may be different.

The moral arguments for permitting embryonic stem cell research are faulty. Only a few can be mentioned here. One argument is that the so-called "spares" that result from in vitro fertilization will be discarded anyway, so why not use them? But the facts are

otherwise: Many spare embryos have been frozen; all have not been destroyed even though permission may have been given. The fate of spare embryos is, therefore, not as certain as we may suppose.

Even if parents were to consent to use of their spare embryos, this would not change the inherent moral status of the embryo itself. Embryos created specifically for research do not have a different moral status than embryos created for reproductive purposes. In both instances, the embryo would be treated as a means to an end and its inherent moral status, if violated, is a violation of moral borders. There is no moral or legal basis for subjecting any member of the human species to harm or death in nontherapeutic research based on the prediction that they will die anyway no matter how certain that prediction may be.

An issue of complicity as well as justice lies in the use of tissues from aborted fetuses or therapies developed from the destruction of embryos. Many Catholics, and probably many others, would object,

as some already do, to vaccines and transplants derived from the sources that they take to be immoral. Catholic hospitals could not on principle use such therapies. Supporting such research from federal funds would impose an injustice, I believe, on Catholics contributing to something that they think to be intrinsically wrong.

Even in the general public there is, as yet, no overwhelming moral consensus for approval of the destruction of human life for experimental purposes. Even if there were such a consensus, the moral dilemma would still exist for many members of our society. Opinion polls and plebiscites do not per se establish moral norms.

Those who favor embryonic stem cell research, like the Human Embryo Research Panel, grant, as have legal opinions, that the embryo should be treated with "respect." When we inquire into what they mean, it seems to be merely assuring that these embryos will be destroyed only "...in research that incorporates substantive values such as reduction of human suffering."

That is from the Ethics Advisory Board of the Geron Corporation. This is a fragile form of respect since it makes the embryo's dignity and protection conditional on something other than itself.

Even if these and many other ethical issues were surmountable -- as I think they are not -- much of the argument for embryonic stem cell research rests on the promise to control abuses by appropriate legal constraints. This is a dubious assurance as the difficulty and inefficiency of enforcement of the regulations concerning euthanasia and assisted suicide have been amply demonstrated in the Netherlands to be ineffective. In any case, is it possible to separate "spare embryos" from embryos intentionally produced as stem cell sources? The temptation to make "spares" is obvious.

The temptation to stretch the envelope is already apparent. Clearly, a major biological problem is how to direct pluripotential stem cells to take a desired direction, let us say, to form myocytes rather than

osteocytes. The question has already been raised of whether cells a little further along in differentiation might not be more successful. The pressure to use somewhat more mature cells will mount, if only to test the hypothesis. Again, experiments involving the death of embryos. Further, it is not at all certain that frozen spare cells will actually function the same way as "fresh" cells. The temptation to create or "find" spare cells during IVF will be strong. Finally, it is still uncertain that pluripotential cells are not totipotential and capable of developing into a complete human embryo.

There is also the obvious complication of profits and patents, and the close association of the current research with the biotech industry. It is not unfair to question the protection of ethics review boards appointed by and serving corporate entities. This is not to impugn motives but only to recognize the conflicts of interest when profit and prestige are at stake.

I believe the Commission would serve the public welfare and the cause of morality best if it were

to reject any attempt to legitimate embryonic stem cell research from IVF blastocysts or from aborted fetuses. The moral, legal and practical impediments are of such magnitude and complexity that the Commission should instead strongly encourage the funding and development of alternate sources of stem cells, those that do not depend on the destruction of living human embryos or make use of cells from induced abortions.

In light of the rapidity of the developments in this field, the possibility and probability of morally acceptable sources of stem cells is a reality. Therefore, both scientific and ethical prudence would dictate a delay in the implementation of any policy covering such research on such questionable moral grounds.

Like all scientific research, stem cell research has tremendous potential for human benefits. But if it is not held within ethical constraints it can easily overshadow the very humanity it purports to benefit. As presently conceived, human stem cell

research goes beyond the boundaries of moral acceptability.

Thank you.

DR. CHILDRESS: Thanks.

Commissioners, any questions for clarification for Ed at this point?

Margaret?

MARGARET FARLEY, Ph.D., YALE UNIVERSITY

DR. FARLEY: The Roman Catholic moral tradition offers potentially significant perspectives on questions surrounding research on human embryonic stem cells. I use the plural, "perspectives," because there is not an uncomplex single voice from the Catholic community on such questions. There is, however, a shared "community of discourse," so that one can easily identify common convictions expressed in a common language, as well as specifically divergent views on this and other particular moral issues.

First, the common convictions: The Catholic tradition is undivided in its affirmation both of the

goodness of creation and the importance of human agency in the ongoing processes within creation. With one mind, Catholics have found also the importance of both the individual and the community. Seeing these not finally as competitors but as essentially in need of each other for the fulfillment of both. It is never possible from this tradition to justify in an ultimate sense the sacrifice of an individual to the community or to forget the common good when thinking about the individual.

It is also clear to everyone in the Catholic tradition that human persons are responsible for their offspring in ways particular to humans and that future generations matter, both in this world and in a hope for unlimited future.

The Catholic tradition is unified in its belief in God's active care for the world and each person in it, and in our own correlative obligations to care for those who are in need, preventing unjustified harm, alleviating pain, protecting and nourishing the well-being of individuals and the wider society. There are

deep roots in the Catholic tradition that anchor a commitment to the most poor, the most marginalized, the most ill; and that in doing so sustain a commitment to human equality in its most basic sense.

At the same time, there are clear disagreements among Catholics, whether moral theologians, church leaders, ordinary members of the Catholic community. Disagreements on particular issues of, for example, fetal and embryo research, assisted reproductive technologies, and the prospects for morally justifiable human stem cell research. These disagreements include conflicting assessments of the moral status of the human embryo and the use of aborted fetuses as sources of stem cells.

So much agreement on fundamental approaches to human morality, yet disagreement on specific moral rules is not surprising. For one thing, affirmations of the goodness of creation, human agency, and principles of justice and care do not always yield directly deducible recommendations on specific questions like stem cell

research. Or again, genuine concerns for the moral fabric of society do not by themselves settle empirical questions regarding possible good or bad consequences of the development of particular technologies. There is, for example, often no easy and direct way to determine whether a particular set of choices regarding scientific research will violate the rights of some persons to basic medical care or undermine respect for the dignity of each individual.

At the heart of the Catholic tradition, however, there is a conviction that creation is itself revelatory, and knowledge of created beings requirements for respect is accessible at least in part to human reason. This is what is at stake in the Catholic tradition's understanding of natural law. For most of its history, a Catholic natural law theory has not assumed that morality can simply be "read" from nature, not even with the important help of Scripture.

Nonetheless, what natural law theory does tell us where to look, that is to the concrete reality of

the world around us, to the basic needs and possibilities of human persons in relation to one another and to the world as a whole. Looking to concrete reality means a complex process of discernment and deliberation and a structuring of insights, a determination of meaning, from the fullest vantage point available given a particular history. One that includes the illumination of Scripture and the accumulated wisdom of the tradition. The limits, yet necessity, of this process account for many of the disagreements about specific matters, even within the faith community.

This brings us, then, to disagreements regarding human embryonic stem cell research. Those who stand within the Catholic tradition tend to look to the reality of stem cells and, what is relevant in this instance, to the realities of the sources of stem cells for current research, that is human embryos and fetuses.

Within the Catholic tradition a case can be made and is made both for and against such research, each dependent upon different interpretations of the moral

status of the human embryo and the aborted human fetus. There are, first, a significant number of Catholics, including present spokespersons for the American bishops, who make the case against. They argue that human embryos must be protected on a par with human persons, at least to the extent that they ought not to be either created or destroyed merely for research purposes.

Moreover, the use of aborted fetuses as source for stem cells, while not in one sense different from the harvesting of tissue from any human cadavers, nonetheless should be prohibited because it is complicit with and offers a possible incentive for elective abortion. Part of the case against human embryo stem cell research also rests on the identification of alternatives, the possible use of adult cells, dedifferentiated and redifferentiated into specific lineages. One can presume also that the case against embryo stem cell research includes a case against cloning, if and insofar as this research incorporates first steps involved in procedures for cloning.

But on the other hand, a case for embryo stem cell research can also be made on the basis of positions developed within the Catholic tradition. A growing number of Catholic moral theologians, for example, do not consider the human embryo in its earliest stages, prior to the development of the primitive streak or to implantation, to constitute an individualized human entity with the inherent settled potential to become a human person. The moral status of the embryo is, therefore, in this view not that of a person and its use for certain kinds of research can be justified. Those who would make this case argue for a return to the centuries-old Catholic position that a certain amount of development is necessary in order for a conceptus to warrant personal status.

Embryological studies now show that fertilization or conception is itself a process, not a moment, and these studies provide warrant for the opinion that in its earliest stages, including the blastocyst stage when stem cells would be extracted for purposes of

research, the embryo is not sufficiently individualized to bear the moral weight of personhood.

Moreover, some of the concerns regarding the use of aborted fetuses as a source for stem cells can be alleviated if safeguards such as ruling out direct donation for this purpose are put in place, not unlike those safeguards articulated for the general use of fetal tissue for therapeutic transplantation.

And, finally, concerns about cloning may be at least partially addressed by insisting on an absolute barrier between cloning for research and therapeutic purposes on the one hand and cloning for reproductive purposes on the other. The latter, of course, raising much more serious ethical questions than the former.

We have, then, two opposing cases articulated within the Roman Catholic tradition. It would be a mistake to conclude that what this tradition has to offer, however, is only a kind of draw. It offers, rather, an ongoing process of discernment that remains faithful to a larger set of theological and ethical

convictions, that takes account of the best science can tell us about some aspects of reality and that aims to make one or the other case persuasive on the basis of reasons whose intelligibility is open to the scrutiny of all.

I, myself, stand with the case for embryonic stem cell research and I believe this case can be made persuasively both within the Catholic tradition and in the public forum. The newest information we have from embryological studies supports this case and I believe it can be made without sacrificing the tradition's commitments to respect human life, to promote human well-being, and to honor the sacred in created realities.

Further, to move forward with human embryonic stem cell research need not soften the tradition's concerns to oppose the commercialization of human life and to promote distributive justice in the provision of medical care.

Our tradition's ongoing conversation on such matters yields more light than I have time to show here.

It is also a reminder to all of us of the importance of epistemic humility, especially if and as we decide to open more and more room for the human control of creation.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thanks, Margaret.

Before we see if there are any questions for Margaret and then open the discussion with our three panelists, let me welcome Larry Miike, a commissioner, from Hawaii, who just joined us and also Professor Nancy Duff from Princeton. Thanks for joining us.

All right. Any questions, first of all, for Margaret, for clarification before we open for discussion for all three?

DR. SACHEDINA: I had a question. Creation is a revelatory process in what sense?

DR. FARLEY: Creation is revelatory, which is to say that it is fundamentally intelligible. It tells us something about what it is and about who God is. And Scripture aids us in -- what shall I say? -- discerning

what creation is. But there is something revelatory not only in Scripture but in creation itself, which is strongly held in the Catholic tradition.

DR. CHILDRESS: Do our panelists have anything to direct to each other? There is clearly some important areas of overlap but also some areas of disagreement. Any discussion among yourselves you would like to pursue?

DR. PELLEGRINO: Not at this time.

DR. FARLEY: I think it just shows what I am trying to say that there are different points of view on the very specific question.

DR. CHILDRESS: Once you get down to the very --

DR. FARLEY: Yes.

DR. CHILDRESS: Kevin, a question that I would like to start with and pursue with you first and then get Ed's and Margaret's responses as well, in the -- in some of the things you have written, one with Tris Engelhart, you noted the moral pluralism we have and then

you said that then from the standpoint of public policy that requires allowing a lot more things to occur. Now that could be said from a legal standpoint but that may not address the funding issue and obviously one of the big questions that arises from the administration and for NBAC is whether this should be subject to a matter for government funding.

What kinds of reflections would you have about those matters? Now several of you addressed the subject. You did and others, the social justice issue as it relates to the funding question. But what thoughts would you have from the standpoint of public policy given what you take to be the Roman Catholic position on the matter before us?

DR. WILDES: Well, first of all, I agree with Margaret that it is important to see that there is diversity about specific judgments within the tradition itself, I think. But what I have argued elsewhere on other issues is a position of more quasi-libertarian in terms of allowing a lot of public freedom.

But when you get to the issue of public investment I think this is a -- and this is part of what I was trying to flag in my last comments on social justice -- there is a question about how do we as a society want to use our public resources and that is -- I think we are -- in fact, I think this is an area where as a society we do not have much by way of a common imagination or a common language to ask these kinds of questions about what do we, we as a society, owe people. How should we be directing our public resources?

And it is -- it is a political and moral judgment so there is not going to be a -- I would argue there is not a singular correct answer that we are going to make to this but I would like to at least see as part of this discussion a larger question about is this a good use of public resources given other needs. So as not to see it in isolation but just by itself.

DR. CHILDRESS: Margaret, do you want to respond?

DR. FARLEY: Yes. I would like to say that the Catholic tradition, while I consider it a theologically based tradition, nonetheless it has always thought that it had something to offer to the public forum in a pluralistic society because its arguments basically aimed to be persuasive to all human persons. So that -- first of all, I think that the Catholic community insofar as it would object to the use of public funds for human stem cell research has to make its case persuasive and I think that that is a part of all of this conversation.

I think, myself, a case can be made persuasively that it is not just the -- at the moment the official. I mean, there is no definitive official statement on stem cell research. There certainly are position statements by the leaders of the church, et cetera.

So the first question is can this case for it, and not only the one against it, be made persuasive? Or if the one against it holds, can it be made persuasive

for the whole society? In which case it should be taken into account in public funding.

If it cannot then it seems to me -- and it becomes a minority opinion within the whole society -- then it seems to me it probably cannot be determinative though there have to be all the ways out for conscientious objectors in terms of putting their public funds to what they believe is intrinsically wrong. So, I mean, we have two ways of looking at it.

DR. PELLEGRINO: I agree with what Kevin and Margaret have said but I would like to expand it just a little bit. I would like to make a distinction between the notion of -- as a political concept, which is certainly inherent in a democracy, and I would agree fully that whatever case one wants to make, is to be made, in the public realm using whatever measures are available in a democracy to make that case.

I do not think any of my colleagues are suggesting that but I think we must be very, very clear that does not establish what is morally right or morally

correct. Therefore, protection of the conscience of those who disagree becomes an essential feature of the democratic society. It has been in our tradition. I do not know whether it is respected fully but I think it is a very important part of it.

And so when it comes then to a question of asking someone who believes that it is intrinsically wrong, and I have used that word "intrinsically" several times and I realize this would create a problem with some of my colleagues perhaps but the point is some of us do believe that this is an act which by itself, let us say abortion, is intrinsically wrong. We are not arguing the case here.

To be asked to contribute funds to it and, therefore, to have some degree of enforced complicity is, I think, a very serious violation of moral integrity of the citizens of this country. How I would handle that, again back to the democratic processes, I am not suggesting any diversion from that. But I think we can expect in this, if this were to become a policy, a

significant degree, I think, of moral distance and dissidence.

DR. CHILDRESS: Arturo?

DR. BRITO: I had a question for Dr. Wildes relevant to the issue of social and distributive justice because I, too, you know, have a lot of concerns about that. But one of the arguments against that is that if there is not federal support for this type of research the privatization or the -- in the private world there will be stem cell research and, therefore, the distributive justice becomes a lot bigger issue, a bigger problem.

How do you address that?

DR. WILDES: I have no solution to this question but I think this is an ongoing dilemma if we are -- there are lots of issues in the United States -- in America in the sense that if it is not a public issue it becomes a private marketplace issue, which then raises issues -- further questions about are we dealing with

commodities and is this something that ought to be co-modified and bought and sold along the way.

And that is why -- one of the things I, again just briefly mentioned, was that part of this issue about organizational justice or social justice is how do -- what kind of legitimate claims are there for social oversight of the private markets and what goes on in private markets and what kind of recommendations ought we to make in those areas as well?

So I think these are broader questions that we -- you are right. The problem is, at least currently, because we do not have a way to talk about and work at larger social policy questions. If we decide not to go down the road then it becomes simply privatized and we go straight into the marketplace.

DR. CHILDRESS: Margaret?

DR. FARLEY: I guess I would just repeat that. Sometimes the concerns in the Catholic community for social justice are on a collision course with concerns for not funding say also for reproductive

services, not only just stem cell research, and I think this has to be taken seriously, especially when there is a division of mind on these issues within the Catholic community itself.

DR. CHILDRESS: Eric, and then Larry.

DR. CASSELL: Yes. I want to pick up on something Margaret Farley said and it has occurred around this table before. When the embryo is under attack in the abortion controversy, one thing that gets painted with a very broad brush, all embryos are persons. But then when this issue comes up we begin to look at it and see that, in fact, its status is ambiguous, particularly the embryo that was going to be used for in vitro fertilization. And it is not to say that it can be frozen, of course, just puts off the issue just like the freezing puts off the issue, it does not change it.

There is a point at which it is hard to say is it alive or not alive. Just like when a person dies many, many cells in the body are alive in the sense that they can be utilized and grown in tissue culture and so

forth for a long time after the heart stops beating. And here again we have this issue of these cells, are they in a living thing or are they not? It certainly cannot be alive without the uterus in which it is implanted or without putting off the question in a freezer.

So it has a status -- biological status as well as moral status that is strange and new for us. And in this issue we are trying to find a way both to satisfy the needs of a large public forum for relief of disease and at the same time not be morally offensive and so that particular area is one that concerns me. And I raise it now to avoid having to say it again and again after everybody's conversation, this particular strange entity.

DR. PELLEGRINO: Could I ask a question?

Eric, what do you mean, is it alive and not alive? I don't quite understand. Blastocysts? You think it's alive?

DR. CASSELL: Well, when does it stop being alive?

DR. PELLEGRINO: It stops being alive when you take out the inner cell mass.

DR. CASSELL: But before that it is alive?

DR. PELLEGRINO: Of course, it is.

DR. CASSELL: Until when?

DR. PELLEGRINO: It is a living cell.

DR. CASSELL: Until when?

DR. PELLEGRINO: It is --

DR. CASSELL: I mean, does it go on and never die?

DR. PELLEGRINO: No, wait a minute.

DR. CASSELL: If you just leave it out there, remember we are talking about something --

DR. PELLEGRINO: Well, if you let it die -- if you do not provide it nutrients it is going to die.

DR. CASSELL: At what point is it dead?

DR. FARLEY: It may be that we have a confusion of the issues in terms of human life and human personal life. I mean, to say that it is alive is not the same as to say that it is a person.

DR. PELLEGRINO: That is correct.

DR. FARLEY: So to say that it is human life of some form is to say, yes, it needs respect, which I agree with Ed Pellegrino that it is very hard to tell what people mean by that. But, I mean, at the very least it could mean that it ought not to be bought and sold.

DR. CASSELL: Yes, but that is a different issue.

DR. FARLEY: But I think that distinction of life and personhood regard are extremely important.

DR. CASSELL: Very important.

DR. PELLEGRINO: Let me get to that point because that is what I was leading up to. I think even if you should lay aside the question of personhood for the moment, which is a metaphysical and ontological question if you want, if you do not interrupt -- I am talking now about the embryo and the fetus -- if you do not deliberately interrupt the pattern of that development, what is it going to turn out to be?

DR. CASSELL: But this is not that same thing because if you --

DR. MIIKE: Can I just reverse that though? Some research is beginning to show that you can look at fertilized ovum and decide which ones can progress on to become a human being.

DR. PELLEGRINO: Yes. Okay.

DR. MIIKE: What would you consider those that are defective and that they would never be able to progress on --

DR. PELLEGRINO: Yes. But they still are alive and they would go to a certain level and you can predict what that level is.

(Simultaneous discussion.)

DR. PELLEGRINO: May I? With some degree of accuracy you can depending upon what the genetic constitution is. But in any case, until they cease respiring, metabolizing, et cetera, they are alive.

DR. MIIKE: I understand that they are alive but I am asking the question about whether they are to be

treated as equally as those with the potential to become fully --

DR. PELLEGRINO: Yes.

DR. MIIKE: Even knowing that they do not have the potential to become --

DR. PELLEGRINO: First of all, your certitude is not that great.

DR. MIIKE: Well, I think that there are cases where, for example, you have women with ova who have something wrong in the cytoplasm that they know that those fertilized eggs --

DR. PELLEGRINO: Will probably not --

DR. MIIKE: -- cannot --

DR. PELLEGRINO: -- yes.

DR. MIIKE: -- yes. But anyway I have some other things. It is interesting to me that we talk about general issues and then we say, of course, when we get the specific issues that is where the rubber hits the road. That is what public policy is. That is what we are here for.

DR. PELLEGRINO: Right.

DR. MIIKE: And then the other part is -- and so -- I am sorry I came in late and did not hear it but I am glad to see that there are a variety of opinions on the matter of where one's moral stance is coming from. But it is curious to me about this issue, which has not been followed up, I have just heard comments from Dr. Pellegrino, about giving an out to conscientious objectors. It is a little different in a war situation when you are the one that is going to be asked to go and fight and you can get an individual out. When we are talking about public funds like this, how do you do that? I mean, from a standpoint of war people can say, "I will not go and --"

DR. FARLEY: I will not pay my taxes.

(Simultaneous discussion.)

DR. FARLEY: If you really think -- if you really are convinced that this is equivalent to something intrinsically wrong, I mean I suppose you have got to do that. Now it puts people in a pretty difficult situation

and you have to see how many people this is. I mean, this is all part of public policy --

DR. MIIKE: But that is not giving people an out if they are not excused from paying taxes if they have decided to take a stance and go against what the public policy is. So that is really not giving people an out. That is giving people a --

DR. WILDES: But there really -- but there -- in a certain sense there is two questions interposed there. One is the question of if -- it is the individual choice about if I am opposed to something what should I do. And the other is the question about how ought we to structure policy so as to allow as much freedom of conscience as possible.

So, for example, in the war example it is not only a question of whether I go to serve but -- any number of people have withheld taxes that -- you know, there was an individual stance that they took about -- so not to support the defense department.

Maybe part of what the question is, is that we need to look at down the line is ought we to structure things in such a way as to allow people to dissent, if you will, to maintain them so that their tax money is not supporting things that they find to be morally --

DR. MIIKE: I find that --

DR. WILDES: It may be impractical but I find the IRS impractical, too.

(Laughter.)

DR. CASSELL: But the morals of the organization, that is not what we usually look at to determine the morals of the country.

DR. CHILDRESS: I know there are several around the table with questions but the reason I am holding off and just getting the commissioners first is that we will have a chance to go around and get everyone and we are short on time.

We are running close to the end here. We have extended about ten minutes but we are short in the way we have set up the first part of the program since we

managed to persuade Margaret late to come and build in that extra ten minutes there. So we are going to run ten minutes behind what the schedule indicated.

Let's finish this conversation.

DR. PELLEGRINO: Well, I just want to add on this last discussion. I think one needs to understand the gravity of the complicity in the case of this kind of thing where you are destroying human life as opposed to other choices we might make in our society. And some of us might take that to be so significant that one would have to not pay their taxes.

But I think you need to also if you are talking about public policy consider that there are 50 million plus somewhere Roman Catholics who might or might not share this view, some number. Certainly others of other persuasions who might share the same view of complicity.

I think this is a much more significant problem than simply an individual conscience not wanting to be involved in something he does not believe in. It

is a very serious problem and it is not a trivial one. The gravity is such that I think the imposition of an obligation to resist might be very, very stronger than some other things.

DR. MIIKE: I understand but I think the issue is I do not think it is the NBAC's -- I do not think we have the smarts to do it. No matter which way you go there is going to be a significant difference in opinion and I do not see a way in which there is a happy compromise to be reached.

DR. CHILDRESS: Earlier you mentioned, though, different degrees of moral gravity.

DR. PELLEGRINO: Yes.

DR. CHILDRESS: I mean, you used gravity at this point but you mentioned different degrees. I take it from your standpoint that within the Roman Catholic tradition there could well then be different degrees of opposition to --

DR. PELLEGRINO: Yes, related to the degree of perception of gravity.

DR. CHILDRESS: Right.

DR. PELLEGRINO: I gave one position and we heard another position.

DR. CHILDRESS: Arturo? This will be our last question before moving on.

DR. BRITO: Okay. This is kind of to switch gears a little bit.

Dr. Pellegrino, you have mentioned that human life is a continuum from the one cell stage. If it is a continuum how do you or the Catholic Church, in general, view the germ cell then? Is it immoral to do research on germ cell --

DR. PELLEGRINO: You are talking about gametocytes?

DR. BRITO: Right.

DR. PELLEGRINO: No.

DR. BRITO: Okay. That is the first part of that question. Because that then raises the issue of, well, then, you know, at the point of conception that is

just another step in the process if it is truly a continuum but --

DR. PELLEGRINO: No, it is not because at the point of conception you have the generation of the new individual and its own unique genetic make-up.

DR. BRITO: Okay. And this leads me to the --

DR. PELLEGRINO: It is a new individual thing. A gametocyte has -- is a cell. And as somebody said as far as sperm goes there are so many of them that they cannot be very high value.

DR. BRITO: But we know at the point of conception that --

DR. CASSELL: Speak for yourself, Ed.

(Laughter.)

DR. BRITO: -- that a fertilized egg is not necessarily an individual yet.

DR. PELLEGRINO: Oh, no, no.

DR. BRITO: At the point of fertilization it has not developed -- there is still a point where it can individualize. For instance, in --

DR. PELLEGRINO: No, no, that is a debatable point. I think biological information is gathering on both sides of this issue and I think the notion that we can talk about the primitive streak at 14 days, that is a term that will fall into -- its biological basis is very, very --

DR. BRITO: Okay. Well, we are not --

(Simultaneous discussion.)

DR. BRITO: -- about that issue but my question is --

DR. CHILDRESS: Twinning can occur -- you admit that twinning can occur later in the process, right?

(Simultaneous discussion.)

DR. CHILDRESS: Right?

DR. PELLEGRINO: Correct. But then with that what you are willing to do is do away with two individuals rather than one.

DR. BRITO: Okay. But my point is that it is all continuum.

DR. PELLEGRINO: The potential is there.

DR. FARLEY: But, look, the potential --

DR. BRITO: Dr. Farley, this has to do with a point Dr. Farley made in her statement --

DR. PELLEGRINO: Yes.

DR. BRITO: -- about that there is a centuries-old Catholic position that a certain amount of development is necessary in order -- can you address that, that comment for --

DR. PELLEGRINO: I think --

DR. BRITO: -- personal status. Is that --

DR. PELLEGRINO: Without getting into debate here with Dr. Farley, I think -- I hope you would agree that that is a debatable issue.

DR. FARLEY: Well, I mean --

DR. PELLEGRINO: I mean, historically.

DR. FARLEY: That is true. It is not a monolithic one line all the way through but it certainly is true that major positions -- the major position in certain periods in history thought that you needed some form of embodiment that had the capacity to be ensouled (?) or you talked about the subtle potential.

I mean, potential is a term that is used in so many different ways but the subtle potential, the sort of Aristotelean notion of potential that actually has within it all that is necessary to develop into something that was not there at the beginning.

I mean, one could add it is a reversal to the -- all the questions on embryo research and again unfortunately I think the abortion question gets in the middle of all of this but there are a lot of Catholics, including Karl Rohner, who is probably the premier Catholic theologian of the 20th Century, who simply said once we found out that 50 and more percent of fertilized ova slough off naturally in the process it did not make

sense to him that God was populating heaven with more people that had never had the chance to see the light of day than those who did.

I mean, it is kind of a common sense perspective and I did not put it in here as a sort of hard argument but Catholics like to make sense of things. That is what a natural approach is and these various matters are important in trying to make sense of things.

DR. PELLEGRINO: My only response to Karl Rohner is he ought to practice some of the epistemic humility to which he recommended --

(Laughter.)

DR. CHILDRESS: Well, one area of humility is that time is limited and we are really grateful to the panel for sharing so effectively with us.

I hope that we will have -- because obviously -- and I saw several hands so I know that there were lots of things we could discuss.

Some of those things will come out in the presentations of others but I hope that we will have some

time even this afternoon for those that can remain to have further discussion that we are not able to complete this morning with this wonderful group of people we have with us.

All right. Let's turn to the second panel and start with -- I think Pat Norris has arranged people in the order in which they will present.

So Rabbi Dorff?

JUDAISM

RABBI ELLIOT N. DORFF, Ph.D., UNIVERSITY OF JUDAISM

RABBI DORFF: The very word "religion" comes from the same Latin root from which we get the word "ligament." It means our bonding or our ligaments to each other and to the environment and to the transcended or to God. And the various religions in the world have very different pictures of who we are and who we ought to be and so in my presentation I start out with some fundamental theological assumptions or convictions of the Jewish tradition, which frankly are different from those of other traditions.

First, the Jewish tradition uses both theology and law to discern what God wants of us. No legal theory that ignores the theological convictions of Judaism is adequate to the task, for such theories lead to blind legalism without a sense of the law's context or purpose.

Conversely, no theology that ignores Jewish law can speak authoritatively for the Jewish tradition, for Judaism places great trust in law as a means to discriminate moral differences in similar cases, thus giving us moral guidance. My understanding of Judaism's perspective on stem cell research will, and must, draw on both theological and legal sources.

Second, our bodies belong to God. We have them on loan during our lease on life. God, as owner of our bodies, can and does impose conditions on our use of our bodies. Among those is the requirement that we seek to preserve our life and health.

Third, the Jewish tradition accepts both natural and artificial means to overcome illness.

Physicians are the agents and partners of God in the ongoing act of healing. Thus the mere fact that human beings created a specific therapy rather than finding it in nature does not impugn its legitimacy. On the contrary, we have a duty to God to develop and use any therapies that can aid us in taking care of our bodies, which ultimately belong to God.

Fourth, at the same time, all human beings, regardless of their levels of ability and disability, are created in the image of God and are to be valued as such.

Moreover, we are not God. We are not omniscient, as God is, and so we must take whatever precautions we can to ensure that our actions do not harm ourselves or our world in the very effort to improve them. A certain epistemological humility, in other words, must pervade whatever we do, especially when we are pushing the scientific envelope, as we are in stem cell research. We are, as Genesis says, supposed to work the world and preserve it; it is that balance that is our divine duty.

The second part of this is on Jewish views of genetic materials.

Since doing research on human embryonic stem cells involves procuring them from aborted fetuses, the status of abortion within Judaism immediately arises. By and large, abortion is forbidden. The fetus, during most of its gestational development, is seen as "the thigh of its mother," and neither men nor women may amputate their thigh at will because that would be injuring their bodies that belong to God. On the other hand, if the thigh turns gangrenous then both men and women have the positive duty to have their thigh amputated in order to save their lives. Similarly, if the woman's life or health is at stake an abortion must be performed to save the life or the physical or mental health of the woman for she is without question a full-fledged human being with all the protections of Jewish law, while the fetus is still only part of the woman's body.

When there is an elevated risk to the woman beyond that of normal pregnancy but not so much as to

constitute a clear threat to her life or health, abortion is permitted but not required; that is an assessment that the woman should make in consultation with her physician. Some recent authorities would also permit abortion in cases where genetic testing indicates that the fetus will suffer from terminal diseases like Tay-Sachs or serious malformations.

The upshot of the Jewish stance on abortion, then, is that if a fetus was aborted for legitimate reasons under Jewish law, then the aborted fetus may be used to advance our efforts to preserve the life and health of others. In general, when a person dies, we must show honor to God's body by burying it as soon after death as possible. To benefit the lives of others, though, autopsies may be performed when the cause of death is not fully understood and organ transplants are allowed to enable other people to live.

The fetus, as I have said, does not have the status of a full-fledged human being. Therefore, if we can use the bodies of human beings to enable others to

live, how much the more so may we use a part of a body -- in this case, the fetus -- for that purpose. This all presumes, though, that the fetus was aborted for good and sufficient reason within the parameters of Jewish law.

Second, stem cells for research purposes, though, can also be procured from donated sperm and eggs mixed together in a petri dish and cultured there. Genetic materials outside the uterus have no legal status in Jewish law, for they are not even a part of a human being until implanted in a woman's womb and even then, during the first 40 days of gestation, their status is "as if they were simply water" according to the Talmud. Abortion is still prohibited during that time except for therapeutic purposes, for in the uterus such gametes have the potential of growing into a human being but outside the womb, at least as of now, they have no such potential. As a result, frozen embryos may be discarded or used for reasonable purposes, and so may stem cells procured from them.

The third part of this is on other factors in this decision.

One, given that the materials for stem cell research can be procured in permissible ways, the technology itself is morally neutral. It gains its moral valence on the basis of what we do with it.

Two, the question, then, reduces to a risk-benefit analysis of stem cell research. The articles in the most recent Hastings Center Report raise some questions to be considered in such an analysis, and I will not rehearse them here. I want to note only two things about them from a Jewish perspective:

First, the Jewish tradition sees the provision of health care as a communal responsibility, and so the justice arguments in the Hastings Center Report have a special resonance for me as a Jew. Especially since much of the basic science in this area was funded by the government, the government has the right to require private companies to provide their

applications of that science to those who cannot afford them at reduced rates or, if necessary, even for free.

At the same time, the Jewish tradition does not demand socialism, and for many good reasons, we, in the United States, have adopted a modified, capitalistic system of economics. The trick, then, will be to balance access to applications of the new technology with the legitimate right of a private company to make a profit on its efforts to develop and market applications of stem cell research.

Second, the potential of stem cell research for creating organs for transplant and cures for diseases is, at least in theory, both awesome and hopeful. Indeed, in light of our divine mandate to seek to maintain life and health, one might even argue that from a Jewish perspective we have a duty to proceed with that research.

As difficult as it may be, though, we must draw a clear line between uses of this or any other technology for cure, which are to be applauded, as

against uses of this technology for enhancement, which must be approached with extreme caution.

Jews have been the brunt of campaigns of positive eugenics both here, in the United States, and in Nazi Germany, and so we are especially sensitive to creating a model human being that is to be replicated through the genetic engineering that stem cell applications will involve. Moreover, when Jews see a disabled human being, we are not to recoil from the disability or count our blessings for not being disabled in that way; we are rather commanded to recite a blessing thanking God for making people different.

In light, then, of the Jewish view that all human beings are created in the image of God, regardless of their levels of ability or disability, it is imperative from a Jewish perspective that the applications of stem cell research be used for cure and not for enhancement.

My recommendation is that we take the steps necessary to advance stem cell research and its

applications in an effort to take advantage of its great potential for good. We should do so, though, with restrictions to enable access to its applications to all Americans who need it and to prohibit applications intended to make all human beings into any particular model of human excellence. We should instead seek to cure diseases through this technology and to appreciate the variety of God's creatures.

DR. CHILDRESS: Thanks. Let me just see if the commissioners have any questions or clarifications before we turn to the next speaker.

Laurie?

LAURIE ZOLOTH, Ph.D.,

SAN FRANCISCO STATE UNIVERSITY

DR. ZOLOTH: I want to say at the beginning that I was one of the ethicists and theologians asked to take a look at Geron --

(Technical difficulties.)

-- was began as an effort to provide background on the Jewish perspective --

(Technical difficulties.)

I have been asked to think about the moral and ethical issues and legal system that Elliot spoke of before me. The Jewish ethical tradition and belief tradition --

(Technical difficulties.)

-- community is the justification which was created by --

DR. CHILDRESS: Excuse me just a second. We are having a little trouble hearing. I am not sure whether we need to adjust anything. Go ahead. Let's try now.

DR. ZOLOFT: Okay. No one particularly with authority speaks for the entire tradition or for the community, hence in confronting emerging ethical issues what will serve best in the beginning to frame a coherent Jewish understanding of these issues is the widest possible call for inquiry, and the widest possible response.

This paper is a preliminary contribution in that direction in which I raise what I argue are framing questions for further debate.

There is another critical methodological point at which Jewish thought can be said to be distinctive. For Jewish ethics, the framing questions will be those of obligations, duties and just relationships to the other, rather than the protection of rights, privacy, or ownership of the autonomous self. Since much of our thinking in contemporary American bioethics is rights-based, and relies on a model of intricate semi-legal contracts carefully made between autonomous and anonymous strangers, the idea of centering our obligations rather than worrying about our rights can seem simple-minded or naive. But the other, regarding binding gesture, this commanded act of justice, responsibility itself, is the first premise of Jewish ethics.

In general, there are three categories we need to think about in thinking through the issues and

you can see here the difference between focusing only on moral status, which as Elliot pointed out is not the key question for the future of bioethics.

The first is the general issue of whether the act that we are considering, that of allowing for the research, manipulation and use of the human embryonic stem cell, is itself a good act. The research on stem cells, on the possibility of manipulation them, pushing them toward differentiation, or from pluripotency to totipotency, away from differentiation, growing and collection vast amounts of them all raise issues of use and meaning. Are human persons collections of potentially deconstruct-able and dismantle-able other parts, or even other selves? Here we need to address issues of goal, meaning, moral status, the ontological nature of the person; the meaning and scope of medical intervention; the question of what constitutes disease and what normalcy; the relationship between God and human partners; the tension between faith and science; and the

issue of safety. In general, these are problems of talmut.

The next genre of questions, important in a religious legal system such as Judaism, is whether the technical aspects of the complex manipulation required are themselves permitted. Here we need to address questions of origin, of informed consent, the use of advanced reproductive technology such as IVF, cell harvest, use of third parties, extra-coital reproduction, and the perimeters of the family, contracts, the effect on the character of the researchers, and the issue of limits on the applications and participants. In general, these are problems of process.

The last category of question, and one that is, I argue, critically important in Jewish thought, are the issues of justice, access, distribution, and implications of the work on the human community in which we will share an altered medical and social universe. In general, these are problems of context.

Jewish consideration of issues in bioethics is, of course, textually based and based in the casuistry

of halachah in which specific considerations are addressed by textual recourse. Halachic reflection on all innovative scientific research is constrained by the fact that none of the specific issues raised by new technology is directly addressed by Talmudic conversations compiled in the first centuries of the common era, nor in the elaborate medieval commentary that carries the most considerable weight in the classic tradition.

Moreover, we can note that what the rabbinic culture understood as central is not necessarily what moderns consider most salient. For example, the rabbis were not concerned about acting like God, it is they have a concern we act more like God might in most ethical and social/political arenas such as helping the poor, creating justice, and healing the sick, rather than having the modern reoccurring horror of acting like God. Sexuality and procreativity were cheerfully and enthusiastically promoted by social and chemical means and by the use of all available means to promote health.

A further note on reasoning: Jewish reasoning is not simply a setting out of a list of principles and then deciding whether they are applicable or not in a facile binary sense. Rather, it is a series of open-ended arguments intended to include the broad and creative use of history, text, and culture, with many interrupting voices representing competing narratives. What I have done here is to lay out a series of such framing questions to elicit such responses from a range of perspectives.

Of importance to note, also, is that Jewish law, unlike American secular law in which something is permitted or prohibited, describes four categories for possible action that are based on the relationship between morality, halachah norms, and the laws of the secular nation-state. An action may be permitted, or at least unpunishable under the halachic code, but morally undesirable; an action may be permitted and desirable; an action may be prohibited, even if desirable; and an action may be permitted by Jewish law but then prohibited

by the secular state and thus not be permitted by Jewish law.

The first thing we address is the problems of telos and here we have to look at prominence of all life-saving and technology of extending medical intervention.

Someone suggested that, in fact, this -- the Jewish medical ethics is nearly entirely constructed around the principle of "pikuach nefesh" to save a life. To save even one life, the halachah states, it is permissible and, in fact, mandated, and all other "mitzvot" can be abrogated, except for the case of the prohibitions against murder, adultery and idolatry. Using this consideration alone, the technology could be considered ethical since, as we have demonstrated above, it does not involve the mere taking of one life to save another, but the use of the cells of one albeit special type of tissue to save another.

This is a consideration upon reflection that can be advanced about nearly all the technologies that are suggested by this research. If the full use were

possible for this tissue, millions of persons would be afforded years of productive life. While no technological fix ought to be regarded as enabling us to get out of life alive, the work of repair, patching, transfusion, and replacement of damaged tissue would alleviate human suffering without altering the essential self of the recipient as in other tissue transplantation. Moreover, the use of this tissue as a front line test for newly developed drugs would be a remarkable advance.

Some have suggested, in fact, that allowing longer life expectancy or allowing some to live who might otherwise die of, say, fatal cardiac dysfunction has disturbing implications but Halachic considerations would not address these kinds of concerns.

For us the issue of a moral status of the embryo and the issue of temporality begins with the question of what age is the embryo which we are discussing.

While the moral status of the embryonic tissue is the threshold question for many other

colleagues of religious traditions, it is of secondary importance to the question of life saving considerations and the consequence of this technology, given the textual tradition and the Jewish position on the developmental status of the embryo and fetus.

Like nearly all discourse in this field, Jewish understanding of moral status derive from the abortion debate. At stake is whether the fetus is an independent entity, or a part of the body of the mother, "ubar yerickh imo." The Biblical text that grounds the literature says clearly that it is part of the body of the mother.

Moral status of the embryo in Jewish considerations of abortion, the main textual location for discussion of embryos in the Talmud, is based on age and proximity to independent viability. Central to all understanding of embryology in the Talmud and subsequent halachic response is that prior to the 40th day after conception the embryo and fetus is to be considered "like water."

This developmental understanding of moral status is not limited to how the halachah considers the moral status of fetuses. There is ample precedence for rabbinic understanding of changing obligations and even life saving obligations based on the temporal standing of the human person. Liminal times exist not only at the beginning but also at the end of life and there are well established norms that do permit the instrumental consideration of an entity, clearly a human person, and clearly alive, based solely on this understanding of the developmental moral status.

In fact, after infants are born, their moral status is still in the process of development, albeit of a less dramatic nature. Children are not named, nor admitted to the public community until after the eighth day of life. And if a child dies prior to the 30th day of life, the necessary rituals of death are not performed. Shiva is not observed and the Kaddish is not said for the requisite year of mourning. All of these sorts of considerations frame our ability to consider the

moral status of the preimplantation embryo as a nonensouled entity that is deserving of special consideration and respect but is not a human person within the mutually binding halachic system.

Is the pursuit of genetic research a mandated healing?

The task of healing in Judaism is not only permitted, it is mandated. There is no part of the body that is sacred or untouchable. Nearly all commandments can be abrogated to permit acts of lifesaving intervention or healing. Characteristically, Judaism does not interfere with physicians' medical prerogative, providing his considerations are purely medical in character.

Given such positive halachic responses, the nearly universal communal response to all genetic advances that can promote health and increase fertility has been enthusiastically positive in the Jewish world. The absolute mandate to heal, and to firm rejection of the claim that to intervene would counter God's will, is

a clear feature of rabbinic Jewish thought. Further, it is mandated to use the best and most advance methods available as soon as they are proven to be efficacious and not dangerous to the patient. Using this argument, prohibiting the exploration of this field might actually create legal concerns of Jewish health thought as well.

What do we mean by normalcy and disease?

For Jews, the ideas of the normal have been historically used to mark Jews as different, deviant and dangerous. Hence, mapping, marking and altering the physicality of difference are disturbing for Jewish law in terms of history.

Is the alteration of the classic diseased type of the Ashkenazi Jew now used as a marker population in a number of genetic diseases, a similar case? what are the implications if that would be the case? How does the specific history of the Jew, and the fate of the Jewish community at the hands of a state-supported German scientific community inform our discourse on this point?

Secondly, there are problems of process concerning this technology that I will go through quickly in the interest of time that have been described in my background paper.

Can we use drugs to stimulate ovulation? Can we harvest eggs from a woman for IVF, for donor IVF eggs? Many of the sources for these blastocysts actually come from Israel. Can we use donor sperm to perform IVF? Can we use DNA splicing technique?

Is it disrespectful of the dead? To address this problem I have turned to the protracted debate about autopsy in the halachic literature. It seems clear here that the cutting, and dissecting, and use of fetal tissue borders on the prohibitions about desecration of the dead. But several factors mitigate this problem. Hence, the use of its tissue is closer to the use of other human cadaver tissue. For example, the use of cadaver skin for grafting in burn victims or cadaver kidneys for transplantation are within this analysis.

In thinking about this, we may make an extreme comparison imagining the aborted fetus in exactly the same way we might allow the use of the kidneys or skin of a victim of a drive-by shooting. The use of the tissue is in no way seen in the second case as an endorsement of drive-by shootings and the use of the tissue in the first case is not an endorsement for abortion in Jewish tradition.

Another question arises then in Jewish tradition about whether it is "shatnes," an improper mixing of two kinds to merge technology and to ask whether the prohibition against animal-human sexual liaisons might stand in the case of the use of interspecies nuclear transplant.

To ask specifically if the collection might shame the woman is a major consideration in Jewish halachah. The dignity, reputation, integrity of her body, the risk of immodest exposure to the women who carries a fetus were all significant considerations for the rabbinic authorities, who were deeply concerned about

the protection of her body from any event which would force her into shame.

In this way we need to reflect carefully on the informed consent process. Later texts are clear that the embryo and fetus are not the property of the husband. As such, since the fetus is considered part of the woman's body, the woman's mental status needs to be carefully considered, as well as the circumstances surrounding the collection of the egg.

I want to raise an issue but not go into it about whether this informed consent actually involves a nonbinding contract --

DR. CHILDRESS: Would you bring it to a close shortly?

DR. ZOLOTH: Let me just bring it to a close.

DR. CHILDRESS: Okay.

DR. ZOLOTH: There are many other questions.

Scholars of religion, theologians, and bioethicists have been asked to carefully reflect on the breathtaking and sweeping changes in medicine and

research science. Our role, if prudently undertaken, cannot occur without a thoughtful and contextual account of the field of genetics as a whole. Learning about and approving each technology is akin to studying the elephant in small, and blinded groups, feeling trunk, legs and tusk, each part understandable but the whole largely incomprehensible.

We then need to ask tough questions about whether the use of any specific technology will relate to other pieces of research, such as reproduction technology, nuclear genetic transfer, and genetic interpretations.

The Jewish textual tradition insists on the notion that the whole of the intellectual proposition of ethics is linked both to practicality and to prophesy, which means that one's epistemology must be sound but one's vision must be intact.

An Exodus tradition insists on the idea that what is given, and what is now a fixity, can be changed, healed, and imagined beyond. It is the act of moral

imagination that this research calls us to make. But the leap from the present to the possible future will take, in that same tradition of Exodus, certain conditions.

First among these is the passion for just citizenship, for the idea that broad social liberation must take place in a responding and listening community. Next is the consideration for the vulnerable stranger. Finally, Jewish thought reminds us that the world we stand in now is ours only as stewards, and we will need to carefully reflect beyond the rhetorical flourish of that phrase to core issues of regulation and tough standards of enforcement.

How do we set limits on research? How will a large public and plural discourse be assured? How will public justice, the passion for science, and the competing needs of the marketplace contend for our attention?

In our first carefully thinking about this new technology and in our sober reflections and our tendency towards caution, which I argue is a good and

prudent response, that of caution, but it should not blind us to the extraordinary event that this discovery has been. This is a stunning-ly important moment in history of medicine, one with the potential to save and sustain human life.

The work that I have seen, the cardiac cells beating steadily in the laboratory, the nerve cells spinning out their tendrils is impressive and bold work that challenges us to imagine beyond what is into what is possible. It challenges our moral sensibilities and our moral imaginations. It is work that reminds us that there is a special blessing that is said, when one sees a wise secular scholar pass by, said by Jews, in praise of a Creator who makes human wisdom tangible. "Blessed are You, Ruler of the Universe, who has given of Your knowledge to human beings."

In our cautionary deliberations of telos, process and meaning and justice, we will need to foreground the essential ethicist's question of whether this is a "right act" and what makes it so, of how this

act can repair a broken world, or of whether it might not find a place in a world so broken, but we cannot forget our responsibility to support the extraordinary gesture of research science that such a discovery represents.

RABBI MOSHE TENDLER, Ph.D., YESHIVA UNIVERSITY

DR. TENDLER: (Technical difficulties.)

There is an oral tradition and a written tradition. I will elaborate on my written tradition. It is simply easier to deny what I said than what I wrote.

DR. CHILDRESS: I am going to just say Pat has informed me that there has been a problem with the Xerox machine so we will have these statements distributed at the break.

DR. TENDLER: I would like to sort of reorient myself to this meeting. I am not seeing any lion pits I did not believe this to be a theological debate. We are not debating my religion against other religions. I am speaking with pride as someone, who God bless the great-grandchildren, who are sixth generation Americans. My grandparents were born in

America. So I am speaking about my country, its legal system, and what a democracy must do in a pluralistic society in which there are people strongly committed to their religious beliefs as well.

What is the science of the possible? I believe it is a terrible sin that the army gives one of my co-religions ham and eggs in the morning. I believe it's terrible when they let him work on the Sabbath. I believe it's horrible when they approve spousal rights to same sex partners. I am not asking the government to defend my religious position in those areas.

There are people who think eating ham in the morning is only a cholesterol problem, not a religious problem. There are people, including sadly and with shame, I say members of my own faith who have seen fit to be on the liberal side of same sex marriages. I cannot expect the government nor would I not be frightened if the government intruded in defending my religion for when the government intrudes to defend my religion I expect it very well some day to intrude to abolish my religion.

We had a Roe-Wade decision which said that it is a constitutional right for a woman to have an abortion during the first trimester. And as you all know, it is not only the first trimester. It is all three trimesters as well. As you realize, President Clinton vetoed partial birth restriction on abortion indicating a woman today in America can get an abortion legally at any stage of gestation.

The first three months -- may be you are un-American for not getting an abortion. It is a constitutional right that should be exercised. That does not make it right for us. Yet the government has overruled it and, therefore, it is almost a kind of incongruity that we are meeting here to discuss the humanhood of a stem cell when the humanhood of a viable fetus has already been decided to be nonexistence by our government.

But within the framework of our government now with laws already passed on the books and, indeed, they will be there, too, when democratic process review

them, what are we supposed to do about prohibiting stem cell research? How could it be -- and I gave in my little introduction the simple chronology of 1973 Roe/Wade conferring the constitutional right for abortion.

In March '88 the NIH panel deciding that to permit federal support for fetal transplantation research in fetal brain, basically the treatment for Parkinsonism, and the same month the Reagan administration prohibiting providing government funds for any work that would lead to the death or destruction or injury of an abortus.

And in 1992, Clinton enacted into law the NIH recommendation, including the proviso that abortion be decided independently from the research; no fees should be paid to women to donate the abortus; and no selection of the recipient by the donor may be permitted. But permitted nevertheless the destruction of stem cell (sic) or an embryo -- pre-embryo of 144 cells but a viable fetus.

In October of 1998 the Congress Appropriation Act bill providing money for all our needs excluded embryo research.

And in January of this year the HHS Counsel advised that Federal law would permit support of research conducted with stem cells. I believe that is why we are meeting today.

There are two sources for stem cells. There are many sources but there are two sources -- excuse me. There are two sources that are pluripotential. Two sources and it is the cell that really can become every other cell. There are other stem cells. You know, we treat leukemia patients with stem cells. Those are stem cells taken from the bone marrow. They are really well along in their own differentiation and can make only bone marrow cells.

But stem cells that are pluripotential and immortal -- immortality by the way should be understood that maybe all we need is one sinner, one person to violate Catholic doctrine and take out some stem cells,

and these stem cells, assuming that they also do not have antigenicity and they are acceptable to people with all different histocompatibility types, then we have one source of supply for ever after.

The inner cell mass of the blastocyst never entered into the uterine environment. It is 140 cells, generally around the 14th day of development, not implanted, in Jewish law it has no moral status other than that of a gamete. No different than an egg and sperm. A sperm has life, potential life. It needs a little help. An egg has potential life. It needs a little help. Well, this blastocyst has potential life and it needs a little help. It has to be implanted in the uterus. Without that implantation it is a live cell the same as my skin cell, my mucus cells, my muscle cells, they are also live cells, and indeed in Jewish law it is forbidden to kill live cells. You cannot injure yourself because you are killing live cells. The blastocyst has no moral status outside when it is outside the uterus.

Number two, there is a time of gestation. It was already mentioned by Dr. Zoloth, 40 days. A time period that was accepted by the Catholic church all the way back. The time of quickening is the time of humanhood. Forty days in Jewish law is a very significant right of passage. For killing -- doing an abortion after 40 days is murder punishable by death. Before 40 days it is forbidden. For my colleague, Dr. Zoloth, it is not water. We will transgress the Sabbath on Yom Kippur to help a woman who is two days pregnant because she began staining and we have to transgress the Sabbath by transporting her to a hospital in order -- her life is not in danger. As far as she is concerned it is nothing more than a delayed menstruation. -- because we want to save that embryo.

It has value to us but not human value. That value is sufficiently close to human value, sufficient human potential to allow us to transgress all laws to try to save it. But laws of murder, as we know in America, a similar law, the murder law, if you kill an embryo less

than 40 days it is not punishable by murder, not punishable as murder. It is not punishable by death. Certainly it is a forbidden act. That is if it is implanted in the uterus. Without implantation there is no moral status. After implantation is where we get into trouble.

After implantation it is human but the expression that Dr. Dorff used, "It is a limb of the mother," that is a technical term. It does not mean that at all. It is the limb of the mother in some aspects of Jewish law. As I said, when we had our tribunal, someone committing murder on a deformed infant would be put to death. I will leave the word murder, abortion, it is true homicide, no different than killing an individual who already has been born. Forty days is the right of passage into humanhood.

That is the oldest tradition. All the rest is not a decision that is -- I am unfamiliar with. You see much of Jewish law consists of fences around the law. Thou shalt not -- God said came to the rabbis and said,

"Thou shalt not, not, not." These fences around the law we are ordered to do so, this is part of our legal tradition. And I appreciate that in other religions as well.

The idea that I cannot use stem cell research because it may lead to abortion, the point that Reagan made that he did not want to allow embryo research because if you remove the heinous nature of abortion by giving the woman the notion, well, maybe it was not all bad, I did something good, I saved somebody's life, I made somebody who had Parkinson's walk better, talk better, et cetera.

I appreciate that concern. It does not stand, not in law, nor in moral logic, if the consequence of making that extra fence means that someone will die. It means that I cannot engage in life saving research. Fences that interfere with life saving effort are dismantled in Jewish law. It is called a law that the public cannot accept. It cannot live with. (Yiddish phrase.) Okay. Areas where it causes pain and

discomforture, we do not make fences. We do not start off with a Biblical law but we differentiate between Biblical and Rabbinic law.

I read what has been expressed here, the idea that humanhood comes in at the time of zygote formation is so specific a model theology point of the Catholic church that it cannot be introduced in considerations of American law. American law that is a law for all people of all religions. This is a job for education. It is a job that the Pope has done so well. I do not -- in my adult life I do not remember any time when there was so positive a change in people's attitude towards abortion due to the effort of the church.

Little girls do not abort. Little girls that give their -- when they get into trouble, give their children off for adoption if they are members of the Catholic faith. Others abort but they do not. Tremendous success. That is where the effort must be.

Specifically, there are ethical concerns and the concerns are risk/benefit evaluation. For use of

this work for nonlife saving purposes. Once I start making cells to do what I want to do I then have -- I can introduce it to cure orthopaedic problems, to cure neurological problems that are not life threatening. I am not talking about vital organ transplantation. And then you have a significant problem that people do not want to understand and I just call your attention to that recent announcement of someone getting a hand transplant. That is an unethical -- medically unethical thing to have done because this person would have died of lymphoma. You cannot put a man on 20 years of antirejection medicine and not pay the consequence. If you are going to save his life, risk/benefit, okay, I have to give him a heart and he may die of lymphoma 20 years from now, it is worth it. But if I give him a hand, he had a prosthetic device, to give him a hand that is unethical. Likewise to use this work for anything other than truly life saving work, not.

And then, of course, the point of allocation of scarce resources which the government has to decide in

any kind of support should we support this work and not drug rehabilitation and not well-baby clinics, et cetera, et cetera. That is classic allocation at the highest level or so-called macro allocation and that has to be decided by our wise men in Washington.

Then just one last point just to raise the issue for you to think about. I do not know what fully informed consent means. Consent by whom? Usually consent is by person or the guardian. I cannot see parents who just killed a baby be declared the guardian and their consent is needed to use the abortus. They should be excluded. Then who should be included? I believe society makes those decisions but that is too radical a decision to discuss today.

Thank you.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thank you very much. We have about 15 minutes. We will take our break at 10:30 so we have 15 minutes for discussion with the panel.

First, panelists, anything you would like to address to each other?

DR. ZOLOTH: I would like to say briefly two things. One is that the three of us have really -- all of us focused a lot on the issue of justice and outcome and context.

(Technical difficulties.)

DR. ZOLOTH: And I think that is a key thing to think about and I think in all of our papers you will hear more about that.

Two is the notion that sources of origins are not the critical issue here and that is just a difference. You are not hearing an answer to that position as much as a different focus --

DR. _____: Excuse me. Could you speak up?

DR. ZOLOFT: -- on what we think is important and what we share.

But, thirdly, I wanted to say that the science is really changing rapidly rendering a lot of our

theological analysis mute as something about the science changes and that happens, without exaggeration, nearly every week in something that I call rapid -- and I think that -- and for those of us who are theologians for whom it all matters, every detail matters, these kinds of details are shifting our discourse rapidly.

DR. DORFF: I think just one other thing. On these issues, more or less, I think the three of us have a -- you should know that there is a lot of debate within the Jewish tradition. The standard joke is that where there are two Jews there are at least three opinions. And so -- and that is likely to be the case with some of the ramifications of what we are talking about as well.

DR. CHILDRESS: Could you comment a bit on how -- so what some of the alternative positions are? I mean, I take it that in Jewish law, for instance, that there is pretty strong consensus that not much is going to hinge on the moral status of the early embryo, right?

DR. DORFF: Right.

DR. CHILDRESS: There seems to be pretty widespread agreement about that. So where would there be areas of disagreement with -- now obviously there are some differences even among the three of you but, in general, where would other major differences be found?

DR. DORFF: Well, I mean, I would -- unlike Rabbi Tendler, I would say that if stem cell research could be used for restoring health to somebody and not just life that that would be a reasonable use of the new technology.

DR. ZOLOFT: I think it is also important to note that what we have here is a conservative rabbi, an orthodox rabbi and a modern orthodox Jewish studies scholar. So we have --- we do not have -- there is at least two other major branches of Judaism that might have differing views on this. And we might not be as technically bound but I think amongst the three of us, our perspective is, we do take halachah very seriously and believe the law.

And so the questions that dominate the halachah literature are the questions that lead our discussion. I think, in most of our background papers there was other discussions, theological considerations, rabbinic considerations, a myriad of considerations, and classic answers to American bioethics that also inform what I think all three of us share, a strong

DR. TENDLER: I think, indeed, a consensus was heard in that bottom line, we all seem to approve of a go ahead on stem cell research. I think there are significant differences, I pointed out, of what's called abortion. It was correctly said when there are three Jews, there are four opinions but only one right opinion.

(Laughter.)

DR. TENDLER: But I think for the benefit of those unfamiliar, the real issue is the binding nature of what we refer to as halachah. Was halachah a law given by God or was it man made? Basically the conservative reform movement have a man made set of laws, which they respect more or less, and, therefore, can change at will.

We are stuck with a system that began 3,500 years ago and has served us well ever since so we see no need to change and are able to function within that system.

DR. DORFF: That is not a fair understanding of conservative Jewish law. We understand Jewish law as being the product of both God and humanity, as God and as human beings try to discern God's will. We understand that process to take place over history and that, therefore, Jewish law has developed over time and has a historical context. Whereas, orthodox writers generally understand Jewish law as being (a) historical and that is the major difference between the two movements.

I would say that I think that Dr. Zoloth has said something very important. The reform movement, which constitutes about 40 percent of America's Jews, does not see itself as being bound by Jewish law. If we had a reform person here dealing with bioethics my guess is that she or he would nevertheless use some of these sources in order to try to talk about this specific issue simply because it is a very -- along the lines that you

were talking about -- it is a very -- I think a reform person would have a very different methodology but nevertheless would invoke these same sources.

DR. CHILDRESS: Larry?

DR. MIIKE: Yes. Three questions. Two of them can be answered real quickly and I hope the third would have some discussion here.

DR. CHILDRESS: Larry, speak up just a little bit.

DR. MIIKE: Three questions. Two of which can be answered quickly but the third I would like some discussion on.

I assume then that all three of you see no problem with creating embryos for research purposes as long as it is not implanted in women.

DR. DORFF: Right.

DR. MIIKE: Second of all, perhaps I misinterpreted what you said, Rabbi, but I got the sense that given a society of government in which you live that the rules of that government would override your

religious beliefs with the exception, of course, that you would then work the political process to try to change it towards your liking but is that a fair characterization of what you said?

DR. TENDLER: The government would not change my religious beliefs or religious practice.

DR. MIIKE: But you would --

DR. TENDLER: They would undertake a practice, which I would be in disagreement with. And insofar as it did not affect my personal religious liberty I would be bound to support it.

DR. ZOLOTH: It is an interesting question. There might be -- the same thing applies to the other side of the question which is if -- there is not a halachah barrier that I think we would agree we can apply to the creation of embryos for research purposes. That for me does not end the discussion Jewish-ly. That does not alter the discourse Jewish-ly. Because there is not a halachah barrier, in the text that we have that is

derived from the language from the abortion debates and issues does not yet finish the question for me.

I think we are going to have to look as I suggested in the longer paper at other text about relationships, about perhaps in the slavery text, the contract text, the text about essential justice issues, treatment of the poor, treatment of the very ill, other places we need to finish that debate. For me, I do not think that we can -- just do not take from my comments or my colleagues that I think it is perfectly okay to create blastocysts just for research purposes and then destroy them to get to that blastomere.

I do not -- even if the text does not prohibit it, I think it is a troubling issue we have not finished discourse on because there is other places in Jewish tradition that might have things to say about it. Because it is a new technology and a new -- I do not think we can fully say that that is a settled question.

DR. MIIKE: My real question that I really wanted to ask is a statement that you made that science

is moving so fast that it is changing your thinking. Other people would say that is the wrong approach. We have a moral attitude towards something and it should be constant no matter what the particulars of the science is.

DR. DORFF: No, but moral attitudes have to be applied to new circumstances. That is what you are talking about, right? And the way in which you apply them to a particular circumstance might vary by people who share the same religious beliefs or might not.

I mean, what you just heard was that we -- you know, that we agreed that from the point of view of the Jewish tradition the legal status of something outside of the universe is nil but that does not mean -- but that is not the only concern that we have and you have heard some other concerns that we have in terms of the use of -- well, my -- one of my real -- both of our concerns has to do with eugenics, positive eugenics of one form or another. Another concern is the justice issue. Another concern that we have has to do with, you

know, the question of the usages of this and we have some -- a little bit of disagreement as to what would be proper uses of it.

DR. MIIKE: Then what I interpret that to mean is there is somewhere a constant but what that constant is depends on how you apply it.

DR. DORFF: Well, the constant -- I mean, I tried to describe that constant in terms of some of the theological convictions that I have in my paper. Mainly that we have a mandate to heal and we have a duty to heal, and we have a duty -- the community has a duty to provide health care. We are partners of God in that act. Okay. In those acts. That does not mean -- but those kinds of general convictions do not decide whether we as a nation should spend money on this or on, you know, giving food, clothing and shelter to people who are homeless.

DR. CHILDRESS: Rabbi Tandler, were you wanting to respond?

DR. TENDLER: Just to emphasize that religion and religious belief not only judges individuals but is a yard stick to measure the moral stature of society as well. What society wants does not make it moral. Only God can make it legal. Our law is the will of society. That will of society is often a belief contrary to the will of God. We have a special duty to observe the laws of the land as long as it does not impinge upon me personally.

Certainly the attitude today on -- to use an example because it also has driven a wedge within the Jewish community with reform accepting same sex marriages. Considering homosexuality as an alternative lifestyle. The Bible says it is punishable by death. It is not beautiful. We do not look at that. That is absolute. Society about this seems to disagree with the Bible. That is too bad for society. So society will burn in hell. The decision of what is right and wrong is not made by society. That is the point and that is what I meant before by the binding nature in traditional Judaism.

It does not address the society. It certainly -- as you can see, I am a so-called strictly orthodox Jew. My children are all orthodox. My in-laws are all orthodox. I live in a community in Muncie, New York, where every member of my congregation is orthodox. It is an unusual circumstance. All university graduates, 30 percent of them are doctors, 10 percent lawyers, the lawyers sue the doctors, and we are in this world. We find this world a good place to live in without having to give up any aspect of our religion. That is the greatness of America.

We are maybe more indebted to America than any other group because they not only gave us haven, they allowed us to grow. Our religion grew in America because we were able to interact with society and show that our religion fits the social mold as well.

DR. DORFF: Just one other footnote. The issue that Dr. Pellegrino was raising has a very interesting parallel. I picked up Campus Report this

morning. "Mandatory student fees gets Supreme Court hearing," on precisely the same sort of issue.

DR. CHILDRESS: This has been a very, very fruitful session. I hate to bring it to a close but we are at the time -- the rescheduled time for the break. So we will take a ten minute break.

Before we do, there will be an occasion for public comment this afternoon. If you are interested in offering a public comment, please sign up with Pat Norris outside at the desk.

Let's return in ten minutes to resume what has been already a very, very fruitful discussion and thank you very much.

(Whereupon, a break was taken from 10:26 am.. until 10:39 a.m.)

DR. CHILDRESS: Additional copies have been distributed of other papers that were not available at the outset. Again, the people who would like to present in the public testimony period, please sign up outside with Pat Norris.

All right. We will turn to Demetrios Demopulos, Eastern Orthodoxy.

Welcome, and if you will start with ten minutes and then we will have time for discussion.

EASTERN ORTHODOXY

DEMETRIOS DEMOPULOS, Ph.D.,

HOLY TRINITY GREEK ORTHODOX CHURCH

DR. DEMOPULOS: I would like to thank the commission for providing me with an opportunity --

DR. CHILDRESS: If I could just stop you for one moment. The members of the audience said they had a great deal of difficulty hearing people, most people as it turns out and not just a couple, so if you could be sure to speak as clearly as possible into this, and I hope they are still working with this equipment.

DR. DEMOPULOS: Well, thanks again for the invitation.

I would like to, at the beginning, say that I am not speaking for the Greek Orthodox church in an official capacity and the Greek Orthodox church does not

have an official position on these issues but I will offer comments that I believe are consistent with the teachings and traditions of the Orthodox church.

The Orthodox church has a long tradition of encouraging the "medical art" that alleviates unnecessary pain and suffering and restores health. The church, however, has also reminded us that this art is given to us by God to be used according to His will, not our own, since according to St. Basil Cesaria (?), "The medical art has been vouchsafed us by God, who directs our whole life, as a model for the cure of the soul." And later says, "We ought not commit outrage against a gift of God by putting it to bad use." What constitutes bad use is what has brought us here together today. An important consideration for the Orthodox is based on our understanding of what it is to be a human person.

Humans are created in the image and likeness of God and are unique in creation because they are psychosomatic, beings of both body and soul, physical and spiritual. We do not understand this mystery, which is

analogous to that of the Theanthropic Christ, who at the same time is both God and a human being.

We do know, however, that God intends for us to love Him and grow in relationship to Him and to others until we reach our goal of theosis or deification, which is participation in the Divine Life through His Grace. We grow in the image of God until we reach the likeness of God. Since we understand the human person as one who is in the image and likeness of God, that is an authentic human person, and because of sin we must strive to attain that likeness, we can say that an authentic human person is one who is deified. Those of us who are still struggling toward theosis are human beings but potential human persons.

We believe that this process toward authentic human personhood begins with the zygote. Whether created in situ or in vitro, a zygote is committed to a developmental course that will, with God's grace, ultimately lead to a human person. The embryo and the adult are both potential human persons, although in

different stages of development. As a result, Orthodox Christians affirm the sanctity of human life at all stages of development. Unborn human life is entitled to the same protection and the same opportunity to grow in the image and likeness of God as are those already born.

Given this Orthodox understanding of human personhood and life, I cannot condone any procedure that threatens viability, dignity, and sanctity of that life. In my view, the establishment of embryonic stem cell lines, as reported by Thomson in his Science article, was done at the cost of human lives. Even though not yet a human person, an embryo should not be used for or sacrificed in experimentation, no matter how noble the goal may seem.

For me, then, the derivation of embryonic stem cell lines is immoral because it sacrificed human embryos, which were committed to becoming human persons. That the embryos donated for this work were not going to be implanted and had no chance of completing their

development cannot mitigate the fact that they should not have been created in the first place.

In vitro fertilization techniques that routinely result in "surplus" embryos that are eventually discarded is immoral for the same reasons that I have mentioned. I believe, then, that the prohibition of research using human embryos should be continued and, if possible, extended to the private sector as well.

I will add here that I am not an ethicist and I do not know how these things work so I am throwing the little things like this in just to make it sound like I know what I am talking about.

Wishing that something had not been done will not undo it. Established embryonic stem cell lines exist, and their use has great potential benefits for humanity, which need not be reviewed here.

The Orthodox church, as I mentioned, has a long tradition of encouraging the medical arts. We have a long list of healer-saints, physicians who became authentic persons through the practice of medicine.

Invariably, they obeyed the commandment of Christ to his apostles, recorded by Matthew in 10:8. "Heal the sick, raise the dead, cleanse lepers, cast out demons. You received without paying, give without pay." Without going into an extensive exegesis of this verse, the intention is clear; attend not to profit but to the medical needs of others.

Using our healer-saints as a paradigm, I am concerned about how the existing stem cell lines will be used. Will they be used to heal, or will they be used to maximize profits? Market forces are very strong and, in my opinion, often contrary to the general good.

Allowing the cell lines to be used by private companies that are responsible first to their stockholders and investors rather than to the general welfare may compromise the use of the lines. It is imperative that steps be taken to ensure that the lines be used only for therapeutic purposes that will benefit those in need and not be limited to the few who will be able to afford them.

I want to emphasize that the lines must be used only therapeutically to restore health and to prevent premature death. They must not be used cosmetically or to further any eugenic agenda. None of us is physically perfect but all are called to be perfected in Christ. Part of our challenge to participate in the Divine Life is to overcome our deficiencies. We must not attempt to recreate ourselves in our own image.

Because stem cell lines have such great potential for healing, efforts should be made to encourage discovery of more morally acceptable sources. A recent report in Science in January or February by Bjornson and colleagues, suggest that adult stem cells may be less restricted than previously thought. It may be possible to develop techniques to culture such cells without the need to sacrifice the donor. Alternatively, because organ donation is viewed favorably by many but not all orthodox Christians, I would accept cell lines derived from fetal primordial germ cells but only in

cases of spontaneous miscarriage. A fetus cannot be killed for an organ, just as an adult cannot. Also, great care must be taken to assure that the mother's consent is truly informed.

In summary, the Orthodox church promotes and encourages therapeutic advances in medicine and the research necessary to realize them but not at the expense of human life. The church considers human life to begin with the zygote and to extend beyond our physical death, as we were promised eternal life by our God and Savior. Recognizing that we are all in a single and imperfect state, the church admonishes us to strive for perfection through God's grace as we strive to become authentic human persons in communion with God. Because we tend to follow our own will rather than God's, we are reminded to be discerning so that we do not commit outrages by putting a gift of God to bad use.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thank you. Could I just ask for clarification of one matter in opening the

discussion? You said on page 2 that wishing that something had not been done will not un-do it and we do have established embryonic stem cell lines. Their use could be helpful. And then on page 3 you say you would accept cell lines derived from fetal primordial germ cells but only in cases of spontaneous miscarriage.

Now those need not be inconsistent with each other, that last "I would accept" may be a narrower view than the first one. And I guess if I could ask you to unpack the first statement. Does that mean that you would see it permissible for others or from the standpoint of society to use the established embryonic stem cell lines even though they were derived --

DR. DEMOPULOS: Yes. In my opinion, yes. Since the lines exist and they have some benefit. I wish they had not been derived in the way that they were but since they are there I do not see -- I think it would be -- I do not think it would be a good thing to not take advantage of.

DR. CHILDRESS: Now in the Greek Orthodox tradition there is not the same kind of argument about complicity that is prominent in the Roman Catholic moral tradition; is that right? Because that obviously -- looking at --

DR. DEMOPULOS: That is right.

DR. CHILDRESS: -- this morning it is --

DR. DEMOPULOS: That is right. The Orthodox tradition has -- the Orthodox Christian tradition has more concern with theological issues of what the intents are and what the results are than with determining whether or not a particular act is intrinsically moral or immoral.

The argument that -- I mean, that would be the argument I would be using basically to say that immorally derived human stem cell lines can be put to moral use. They should not have been derived but there they are and I cannot say that they are intrinsically immoral or if there is any complicity in using those

lines -- the researchers using them. The error is made by those who created them.

DR. CHILDRESS: Thanks.

Arturo?

DR. BRITO: Well, to follow that up, then, an electively aborted fetus has already been aborted, so the use of those stem cell lines would follow that -- you would think that it is okay to go ahead and use them because that -- are you in agreement with that?

DR. DEMOPULOS: I am not in agreement with that because I am talking about the lines that have been established before we got around to talking about this. I am opposed to killing anything to establish embryonic stem cell lines, whether it is a blastocyst or a fetus. Recognizing that organ donation is considered by many in the Orthodox tradition, myself included, as a very good expression of sacrificial love in offering a part of one's self for the benefit of others, that this could be extended to a fetus that spontaneously miscarries for

some reason and that primordial germ cells could be harvested.

I am not in any way advocating that electively aborted fetuses be used to harvest these cells to establish cell lines in the same way that I am not advocating that further embryos be used to establish other cell lines. I am speaking merely about the cell lines that exist now that we might as well put to good use since they are there and they are not going to go away.

DR. MIIKE: Just to follow-up on that, on the elective abortion issue since you do not subscribe to the complicity issue, my understanding of elective abortions as sources of stem cells is that they are not aborted to collect stem cells, there is an independent decision to abort and they have been trying to put firewalls in between the decision to abort and the decision to donate the cells.

So if that is the current situation then could you sort of explain a bit more about why you are

still opposed to elective abortions as a source of the stem cells?

FATHER DEMOPULOS: Well, because I am opposed to elective abortions.

DR. MIIKE: Okay. But that is the issue then. It is not complicity. It is not the fact that --

FATHER DEMOPULOS: That is the issue. That is exactly it. I mean, the basic issue is cell lines established by taking what the Orthodox church considers to be --

DR. MIIKE: But are you not opposed to murder, also?

FATHER DEMOPULOS: Of course, I am opposed to murder.

DR. MIIKE: But you would agree that if the -- say that little boy in Florida who was shot and his parents decided to give the organs and donate the organs, you would agree that that was a good deed?

FATHER DEMOPULOS: That would be, yes.

DR. MIIKE: How is that any different from the abortion situation?

FATHER DEMOPULOS: It may not be.

DR. CHILDRESS: Eric?

DR. CASSELL: Just a clarification. Is the position, also, that in vitro fertilization per se is not a good thing because it leads to the use -- having excess embryos?

DR. DEMOPULOS: That is one reason. I did not want to get into that too much. It is the issue of the creation of surplus embryos that will not be used for implantation.

The position of the -- many of the moral theologians would be that if procedures could be refined so that an ovum was fertilized by the sperm of the husband of the woman in a sacramentally established marriage and that single ovum then grown and implanted, that would be a permissible reproductive technology.

But to harvest eggs and fertilize en masse and implant some, hold, later, things of that sort, we

would not condone for the same basic reasons that it is destruction of human life that we believe begins the process towards personhood at this stage of the zygote.

DR. MIIKE: A follow-up question on that. If that situation is arrived at through the current methods because in order to arrive at that one must have to do research --

FATHER DEMOPULOS: Yes.

DR. MIIKE: -- so once you arrived at the --

FATHER DEMOPULOS: That is one issue. There are other issues involved with in vitro fertilization and my opposition to the whole thing is one again of intent. It is -- and I question the necessity for couples, women, whatever, to have their own biological child. We have talked about this at the round table last year and somebody mentioned a very good point.

The problem is not one of infertility but one of childlessness and there are many ways to solve the problem of childlessness without resorting to biomedical intervention.

DR. MIIKE: But if we can arrive at a position where you can have a single fertilization between a married man's sperm and his wife's ovum, that would be okay with you?

FATHER DEMOPULOS: That would be okay with some.

DR. MIIKE: Even though if you arrived at that situation by the current methods.

FATHER DEMOPULOS: Actually it would not be okay with me. It would be okay with some, with some theologians in the Orthodox tradition but not with me.

DR. CHILDRESS: Gil?

DR. MEILANDER: Yes. Just one comment. I would not begin to tell you what the Orthodox tradition thinks but I suspect he does have, though not a worked out notion of cooperation, concerns about complicity and I will just give you a different analogy that to me makes sense of his position.

I mean, I think he is worried about encouragement of abortion, for instance, and that is what

is going on. But you could use the analogy of the never ending arguments that have gone on about whether Nazi research data could be used to understand what his concern is.

I think that gets you to the kind of concern he has about -- I mean, he holds the view that it is bad to get these stem cells but they are there and we could use them. You could take the other view. The best way to think about it I think would be to think about that issue about using Nazi data.

DR. PELLEGRINO: And that is what I suggested when I talked about complicity, both that and stolen goods let's say. The source is wrong and you cannot make a good thing out of a bad source.

FATHER DEMOPULOS: Well, I am not convinced of that.

DR. PELLEGRINO: Well, that is the question.

DR. CHILDRESS: Arturo?

DR. MIIKE: My own observation of that is that it just seems inconsistent with the fact that it is okay to use established embryonic stem cell lines.

While you may believe that they are immorally derived but it is not okay to use the -- you know, it is either -- it is either one or the other but that just seems inconsistent with the statement you made about using established embryonic cell lines.

FATHER DEMOPULOS: You know, another thing that I need to point out is that I have already given my major caveat that I am not an ethicist. And the other thing is that the Orthodox tend to be very happy, especially happy when they are sitting in the middle of a paradox and this is how we --

(Laughter.)

FATHER DEMOPULOS: -- develop. We do it paradoxically and with antimony. So it may seem inconsistent but I have struggled with this for a long time to say what do we do with the cells that we have.

Can we throw them away because they were immorally obtained? And I would not say yes. So, yes, it is inconsistent. I am opposed to establishing them but now that they are there we cannot discard them.

DR. CHILDRESS: Thank you very much. Again, I hope -- I know several of you have to leave in the course of the discussion but for those who are around we will have as much interaction as possible throughout the day. Thank you.

Aziz?

ISLAMIC

ABDULAZIZ SACHEDINA, Ph.D.,

UNIVERSITY OF VIRGINIA

DR. SACHEDINA: Thank you very much for inviting me to give an Islamic perspective. I do not represent a church but I do represent the Islamic tradition generally. It is a textual tradition so I have been able to examine all resources that are written by different schools of thought. And two major schools of thought are the Sunni and the Shari'a school of thought,

and they have published literature and really deal with these issues more -- it is not an Orthodox/Reform divide but it is orthodox in a sense, we all refer to the same resources to derive decisions.

The ethical religious assessment of research uses of pluripotent stem cells derived from human embryos in Islam can be inferentially deduced from the rulings of Shari'a, that is Islamic law, that deal with the fetal viability and embryo sanctity in the classical and modern juristic decisions. The Shari'a treats a second source of cells derived from the fetal tissue following abortion analogically similar to cadaver donation for organ transplantation to save other lives and, hence, permissible.

So there is no debate about the fetal tissue and it could be through elective or through other forms of justifiable or nonjustifiable abortion because abortion is not allowed in Islamic unless there are reasons for it and medical reasons or to save the

mother's life, which has precedence over the life of the fetus

For this presentation to the National Bioethics Advisory Commission, I have researched three types of sources in Islamic tradition to assess the legal moral status of human embryo; commentaries on the Koranic verses that deal with embryology; works on Muslim traditions that speak about fetal viability; and juridical literature that treats the question of legal moral status of human fetus.

Historically, the debate in Islam about embryo has been dominated by issues related to ascertaining moral legal status of fetus. In addition, in order to provide a comprehensive picture representing the four major Sunni and one Shi'i legal schools, I have investigated diverse legal decisions made by their major scholars on the status of human embryo and related issue of abortion to infer religious guidelines for any research that involves human embryo.

Let me reiterate here, as I did when I testified to the commissioners about Islamic ethical

considerations in human cloning that since the major breakthrough in scientific research on embryonic stem cells in November 1998, I have not come across any recent rulings in Islamic bioethics regarding the moral status of the blastocyst from which the stem cells are isolated.

The moral consideration and concern in Islam have been connected, however, with the fetus and its development to a particular point when it attains human personhood with full moral and legal status.

Based on theological and ethical considerations derived from the Koranic passages that describe the embryonic journey to personhood developmentally, and the rulings that treat ensoulment and personhood almost synonymously occurring over time, it is correct to suggest that majority of the Sunni and Shi'i jurists will have little problem in endorsing ethically regulated research on the stem cells that promises potential therapeutic value provided therapeutic benefits are not simply speculative.

The inception of embryo life is an important moral and social question in Muslim community. Anyone who has followed Muslim debates over this question notices that the answer to it has differed with the different ages and in proportion to the scientific information available to the jurists. Accordingly, each period of Islamic jurisprudence has come up with its ruling, "fatwa," consistent with the findings of science and technology available at that time. The search for satisfactory answer as to when embryo attains legal rights has continued to this day.

The life of a fetus inside the womb, according to the Koran, goes through several stages. The Koran describes these stages in a detailed and precise manner.

In the chapter entitled, "The Believers," we read the following verse:

"We created man of an extraction of clay, then we set him, a drop in a safe lodging, then We created of the drop a clot, then We created of the clot a

tissue, then We created of the tissue bones, then we covered the bones in flesh; thereafter We produced it as another creature. So blessed be God, the Best of creators."

In another place the Koran specifically speaks about "breathing His own spirit" after God forms human being:

"Human progeny he creates from a drop of sperm; He fashions his limbs and organs in perfect proportion and breathes into him from His own Spirit. And He gives you ears, eyes, and a heart. These bounties warrant your sincere gratitude, but little do you give thanks."

And in another place:

"And your Lord said to the angels: 'I am going to create human from clay. And when I have given him form and breathed into him of My life force, you must all show respect by bowing down before him.'"

The commentators of the Koran, who were in most cases legal scholars, drew some important

conclusions from this and other passages that describe the development of embryo to a full human person.

First, human creation is part of the divine will that determines the embryonic journey developmentally to a human creature.

Second, it suggests that moral personhood is a process and achievement at a later stage in biological development of the embryo when God says: "Thereafter We produced him as another creature."

Third, it raises questions in Islamic laws of inheritance as well as punitive justice whether the fetus should be accorded a status of a legal moral person once it lodges in the uterus in the earlier stage.

Fourth, as the subsequent juridical extrapolations bear out, the Koranic embryonic development allows for a possible distinction between a biological and moral person because of its silence over a particular point when the ensoulment occurs.

Earlier rulings on indemnity for homicide in the Shari'a were deduced on the premise that the life of

a fetus began with the appreciation of its palpable movements inside the mother's womb, which is around the fourth month of pregnancy. In addition to the Koran, the following tradition on creation of human progeny provided the evidence for the concrete divide in pre- and post-ensoulment periods of pregnancy:

And the tradition says:

"Each one of you possesses his own formation within his mother's womb, first as a drop of matter for forty days, then as a blood clot for forty days, then as a blob for forty days, and then the angel is sent to breathe life into him."

Ibn Hajar al-'Asqalani, a Medieval jurist, commenting on the above tradition says:

"The first organ that develops in a fetus is the stomach because it needs to feed itself by means of it. Alimentation has precedence over all other functions for in the order of nature growth depends on nutrition. It does not need sensory perception or voluntary movement at this stage because it is like a plant. However, it is

given sensation and volition when the soul attaches itself to it."

Majority of the Sunni and some Shi'i scholars make a distinction between two stages in pregnancy divided by the end of the fourth month, 120 days, when the ensoulment takes place. On the other hand, majority of Shi'i and some Sunni jurists have exercised caution in making such a distinction because they regard the embryo in the pre-ensoulment stages as alive and its eradication a sin. That is the reason why Sunni jurists, in general, allow justifiable abortion within that period, while all schools agree that the sanctity of fetal life must be linked after the fourth month.

The classical formulations based on the Koran and the tradition provide no universally accepted definition of the term "embryo" with which we are concerned in our deliberations today. Nor do these two foundational sources define the exact moment when fetus becomes moral legal being.

With the progress in the study of anatomy and in embryology it is confirmed beyond any doubt that life begins inside the womb at the very moment of conception, right after fertilization and the production of a zygote. Consequently, from the earliest stage of its conception, an embryo is said to be a living creature that has its sanctity and whose life must be protected against aggression.

This opinion, by the way, is held by Hassan Hathout, another bioethicist who was actually supposed to come here but he could not come.

This scientific information has turned into a legal dispute over the permissibility of abortion during the first trimester and the destruction of unused embryos in the IVF clinics because IVF clinics are existent in the Islamic world they are approved by the law. Some scholars have called for canceling the sanctity of fetal life and permitting its termination.

A tenable conclusion held by a number of prominent Sunni and Shi'i scholars suggests that

aggression against the human fetus is unlawful. Once it is established that the fetus is alive the crime against it is regarded as a crime against a fully formed human being. According to these scholars, science and experience have unfolded new horizons which have left no room for doubt in determining signs of life from the moment of conception. Yet, as participants in the act of creating and curing with God, human beings can actively engage in furthering the overall good of humanity by intervening in the works of nature, including the early stages of embryonic development, to improve human health.

The question that still remains to be answered by Muslim jurists in the context of embryonic stem cell research is: When does the union of a sperm and an ovum entail sanctity and rights in the Shari'a? Most of the modern Muslim opinions speak about a moment beyond blastocyst when a fetus turns into a human being. Not every living organism in a uterus is entitled to the same degree of sanctity and honor as a fetus at the turn of first trimester. And, therefore, there is no burial

ceremony at all attached to the first trimester for the fetus.

Anatomical descriptions of the fetus as it follows its course from conception to a full human person have been closely compared to the tradition about three periods of forty day gestation to conclude that the growth of something well defined form and voluntary movement mark the ensoulment. The opinion is based on a classical ruling given by a prominent Sunni jurist, Ibn Qayyim.

We do not have church but we have countries that follow certain jurists. Saudi Arabia would follow Ibn Qayyim; al-'Asqalani would be followed by Muslim Egyptians. So we are talking about different Muslim groups in the North American context. So some might be following Saudi school and some might be following Egyptian school and some might be following Irani school.

So here Qayyim is giving -- Qayyim is representing the Saudi opinion:

"Does and embryo move voluntarily or have sensation before the ensoulment? It is said that it grows and feeds like a plant. It does not have voluntary movement or alimentation. When ensoulment takes place voluntary movement and alimentation is added to it."

On the basis of all the evidence examined for this testimony, it is possible to propose the following: And I am just trying to sum up what the jurists are saying. It is not my opinion. Anyway I cannot really divulge my own opinion.

First, the Koran and the tradition regard perceivable human life possible at the later stage in biological development of the embryo.

Two, the fetus is accorded a status of a legal person only at the later stage of its development when there is perceptible form and voluntary movement in it. Hence, earlier stage when it lodges itself in the uterus and begins its embryonic journey to personhood cannot be treated as possessing moral status.

Third, the silence of the Koran over a criterion for moral status, for example, when the ensoulment occurs, of the fetus allows the jurists to make a distinction between a biological and moral person, placing the latter stage after, at least, the first trimester in pregnancy.

Nevertheless, the Koran takes into account the problem of human arrogance which takes the form of rejection of God's frequent reminders to humanity that God's immutable laws are dominant in the nature and human beings cannot willfully interfere to cause damage to others. The will of God in the Koran has often been interpreted as the processes of nature uninterfered with by human action. Hence, in Islam, research on stem cells made possible by biotechnical intervention in the early stages of life is regarded as an act of faith in the ultimate will of God as the Giver of all life as long as such an intervention is undertaken with the purpose of improving human health.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thank you.

Commissioners, are there questions?

Could I begin by following up on the last discussion we had and let's say abortion of a fetus occurs. Is it -- and it is viewed as wrong from the standpoint of a particular juristic school being appealed to, does the tradition, to your knowledge, have anything to say about permissible uses of the tissue following what is taken to be a wrongful act?

DR. SACHEDINA: It is an analogy of the use of organs of a murder. In the literature that has come out mostly from Iran prisoners and other sinful people, let's say those who are criminals, have -- that analogy has been extended to the fetal tissue. The fetal tissue -- if any of it has been aborted wrongfully it has the same status as the organ that can be donated and used to save other life. So analogically it has been deduced that it is permissible to use even if the fetal tissue has come from a wrong source, that is from a sinful act of eradication of life, let's say.

And I am talking here about Shi'i view here of Iran because Iran is -- Shi'i are the ones who do not agree with the Sunni's that life begins -- that ensoulment takes place at 120 days. They insist that it begins from day one like Roman Catholics do. So they have a problem with embryos and the use of embryos in the research. So coming from Iran that kind of opinion makes it possible to see the second source of the stem cells, which is the fetal tissue, and it has been used. In fact, I was reading a Russian newspaper coming from Iran just yesterday that it has actually acknowledged the stem cell research as a viable research.

DR. CHILDRESS: Other questions or comments?

Yes?

RABBI TENDLER: My good friend did not mention about the status before implantation. All your comments were in the uterus from day 120 or even on day one but what about how it also covers in the petri plate before it has been implanted? Is there any discussion of that?

DR. SACHEDINA: Again, the analogy is given -- and it is very consistent in a sense -- the women who are raped are not allowed to abort in the previous rulings of the jurists but after the Bosnia situation when rape was used as a weapon against women, the women were allowed to abort in the first 12 days before the implantation took place. That basically was not given the status of a viable entity at that point before implantation.

RABBI TENDLER: Certainly when it is never entered into the uterus you certainly would not have any human status.

DR. SACHEDINA: Yes.

DR. CHILDRESS: Larry?

DR. MIIKE: Can you clarify --

DR. CHILDRESS: Speak up, Larry.

DR. MIIKE: Can you clarify for me the situation where an embryo is created for the purpose of research as contrasted to the excess embryos in IVF clinics?

DR. SACHEDINA: I have not seen any opinions regarding that but the use of other embryos in the IVF situation would allow me to deduce cautiously that I do not think there would be any problem as long as the use is pluripotent and not totipotent.

DR. CHILDRESS: Thank you.

Other questions, comments?

Thank you very much, Aziz.

Okay. We turn now to a discussion of Protestantism and we start with Gil Meilander.

PROTESTANTISM

GILBERT C. MEILANDER, Jr., Ph.D.

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DR. MEILANDER: Let me say that if you have my printed text before you I am only going to be reading part of that to stay within my time so you will have to be prepared.

As I understand it, I have been invited to speak specifically in my capacity as a Protestant theologian, and I will try to do so. At the same time, I

cannot claim to speak for Protestants generally. Alas, no one can. I will, though, try to draw on several theologians who speak from within different strands of Protestantism. I think you can and should assume that a significant number of my co-religionists more or less agree with the points I will make. You can, of course, also assume that other Protestants will disagree, even though I like to think that, were they to ponder these matters long enough, they would not.

Moreover, I have tried not to think of what I am doing as an attempt by some Protestant "interest group" to put its oar into your deliberations. Although I will begin as best I can from somewhere rather than nowhere, from within a particular tradition, its theological language seeks to uncover what is universal and human. It begins epistemologically from a particular place, but it opens up ontologically a vision of the human. You might therefore be interested in it not only because it articulates the view of some sizable number of

our fellow citizens but also because it seeks to uncover a vision of the life we share in common.

To that end I will make three points. For each of the three I will take as my starting point a sentence from a well-known Protestant thinker, not in order to claim that theologian's authority for or agreement with what I have to say, but simply to provide some "texts" with which to begin my reflections.

First, a passage from Karl Barth, perhaps the greatest of Twentieth Century theologians, who writes from within the Reformed tradition: "No community, whether family, village or state, is really strong if it will not carry its weak and even its very weakest members." That sentence invites us to ponder the status of the human embryo, the source of many, though not all, of the stem cells that would be used in research.

No doubt it is in our society impossible to contemplate this question without feeling sucked back into the abortion debate and we may sometimes have the feeling that we cannot consider any other related

question without always ending up arguing about abortion. Perhaps there is something to that but the question of using and destroying embryos in research is a separate question.

The issue of abortion, as it has been framed in our society's debate and in Supreme Court decisions, has turned chiefly on a conflict between the claims of the fetus and the claims of the pregnant woman. It is precisely that conflict, and our seeming inability to serve the woman's claim without turning directly against the life of the fetus, that has been thought to justify abortion. But there is no such direct conflict of lives involved in the instance of embryo research.

Here, as in so many other areas of life, we must struggle to think inclusively rather than exclusively about the human species, about who is one of us, about whose good should count in the common good we seek to fashion. The embryo is, I believe, the weakest and least advantaged of our fellow human beings, and no

community is really strong if it will not carry its weakest members.

This is not an understanding shaped chiefly in the fires of recent political debate; rather it has very deep roots in Christian tradition and, invited as I have been to address you from within that tradition, I need to explore briefly those roots.

We have become accustomed in recent years to distinguishing between persons and human beings, to thinking about personhood as something added to the existence of a living human being, and then to debating where to locate the time when such personhood is added. There is, however, a much older concept of the person for which no threshold of capacities is required, that was deeply influential in Western history and that had its roots in some of the most central Christian affirmations. The moral importance of this understanding of the person has been noted recently by the Anglican theologian, Oliver O'Donovan.

Christians believed that in Jesus of Nazareth divine and human natures were joined in one person and, of course, they understood that it was not easy to make sense of such a claim. For if Jesus had both divine and human natures, he would seem to be two persons, two individuals, identified in terms of two sets of personal capacities or characteristics, a sort of chimera, we might say, in terms appropriate to this gathering.

So Christian thinkers turned in a different direction that was very influential in our culture's understanding of what it means to be an individual. On their view, a person is not someone who has a certain set of capacities; a person is simply, as O'Donovan puts it, a "someone who" -- a someone who has a history. That story, for each of us, begins before we are conscious of it and, of many of us, may continue after we have lost consciousness of it. It is nonetheless our personal history even when we lack awareness of it, even when we lack or have lost certain capacities characteristic of

the species. Each story is the story of a "someone who" -- someone who, as a living human being, has a history.

This is, as I noted, an insight that grew originally out of intricate Christological debates carried on by thinkers every bit as profound as any we today are likely to encounter. But starting from that very definite point, they opened up for us a vision of the person that carries deep human wisdom, that refuses to think of personhood as requiring certain capacities, and that therefore honors the time and place of each someone who has a history. In honoring the dignity of even the weakest of living human beings, the embryo, we come to appreciate the mystery of human person and the mystery of our own individuality.

Second, a sentence from the late John Howard Yoder, a well known Mennonite theologian: He writes, "I am less likely to look for a saving solution if I have told myself beforehand that there can be none or have made advance provision for an easy brutal one."

Stem cell research is offered to us as a kind of saving solution, and it is not surprising therefore that we should grasp at it. Although I suspect that promises and possibilities could easily be oversold, none of us should pretend to be indifferent to attempts to relieve or cure heart disease, Parkinsons and Alzheimer's diseases, or diabetes. Suffering, and even death, are not the greatest evils of human life, but they are surely bad enough -- and all honor to those who set their face against such ills and seek to relieve them.

The sentence from Yoder reminds us, however, that we may sometimes need to deny ourselves the handiest means to an undeniably good end. In this case the desired means will surely involve the creation of embryos for research -- and then their destruction. The human will, seeing a desired end, takes control, subjecting to its desire even the living human organism. We need to ask ourselves whether this is a road we really want to travel to the very end. Learning to think of human beings as will and freedom alone has been the long and

steady project of modernity. At least since Kant, ethics has often turned to the human will as the only source of value.

But C.S. Lewis, an Anglican and surely one of the most widely read of Twentieth Century Christian thinkers, depicted what happens when we, ourselves, become the object of this mastering will. He writes:

"We reduce things to mere nature in order that we may 'conquer' them. We are always conquering nature because 'nature' is the name for what we have to some extent conquered. The price of conquest is to treat a thing as mere nature. As long as this process stops short of the final stage we may well hold that the gain outweighs the loss. But as soon as we take the final step of reducing our own species to the level of mere nature the whole process is stultified. If man chooses to treat himself as raw material, raw material he will be."

What Yoder reminds us is that only by stopping, only by declining to exercise our will in this

way, do we force ourselves to look for other possible ways to achieve admittedly desirable ends. Only by declining to use embryos for this research do we awaken our imaginations and force ourselves to seek other sources for stem cells -- as may be possible, for example, if recent reports are to be believed. The discipline of saying no to certain proposed means stimulates us to think creatively about other, and better, possibilities.

Third, a passage from Stanley Hauerwas, a Methodist theologian: "The church's primary mission is to be a community that keeps alive the language and narrative necessary to form lives in a truthful manner."

Hauerwas does not mean that Christians are necessarily more truthful than other people. He means that when they are doing what they ought to be doing, they worry lest we deceive ourselves, lest we fail to speak the truth about who we are individually and communally, and about what we are doing. This is certainly important for our larger society, and I am

quite sincere when I say that -- whatever this commission decides to recommend -- you can do us all an enormous service if you will speak truly and straightforwardly, if you will help us avoid euphemism and equivocation, so that we may together think clearly about who we are and wish to be.

What, more precisely, do I have in mind? Matters such as the following: That we avoid sophistic distinctions between funding research on embryonic stem cells and funding the procuring of those cells from embryos. That we not deceive ourselves by supposing that we will use only "excess" embryos from infertility treatments, having in those treatments created far more embryos than are actually needed. That we speak simply of embryos, not of the preembryo or the preimplantation embryo, which is really the unimplanted embryo. That, if we forge ahead with embryonic stem cell research, we simply scrap the language of "respect" or "profound respect" for those embryos which we create and discard according to our purposes. Such language does not train

us to think seriously about the choices we are making -- and it is, in any case, not likely to be believed. You can help us to think and speak truthfully, and that would be a very great service indeed.

I have pressed these three points with some reluctance because I have the sense -- as you may well imagine -- that I will be taken to be standing athwart history and yelling "stop." But it is a risk worth taking. We may easily deceive ourselves about what we do, especially when we do it in a good cause, with a good conscience. We need help if we are to learn to speak truthfully and to face with truthfulness the choices we make -- and, whatever this commission's precise determinations, I hope you will give us such help.

Thank you.

DR. CHILDRESS: Thanks, Gil.

Nancy?

NANCY J. DUFF, Ph.D.,

PRINCETON UNIVERSITY THEOLOGICAL SEMINARY

DR. DUFF: I am sorry I do not have copies of my statement.

(Technical difficulties.)

DR. DUFF: -- nor can I now find compelling reasons that that is the technology of human cloning with the goal of bringing a child to birth.

In contrast to my efforts then to find compelling reasons to advance techniques in human cloning, today the potential benefits of stem cell research, including those benefits which arise from the employment of somatic cell nuclear transfer, the technique used in cloning, are staggeringly obvious that we may be on the brink of addressing devastating illnesses in children and adults for which there exists no equally promising treatments cannot be easily dismissed. On the other hand, no matter how impressive these benefits, we cannot justify all actions to achieve them and there, of course, is the rub, the harder the controversy over human stem cell research and therapy revolves around the moral status of the human embryo and

so we reluctantly are not thrown back into the controversy which surrounds abortion.

But what is significantly different -- one of the things that is significantly different about this debate is, as just mentioned, the unquestionable benefit that could arise from stem cell research. We are not embroiled in the battle over whether one intends to destroy a human embryo for insufficiently serious reasons to make the debate worthwhile.

In light of the possibility of preventing or correcting Down Syndrome, childhood leukemia and other cancers in children, childhood diabetes, the devastating effects of head injuries, and all of those same situations in adults, including the life threatening debilitating conditions found in adults, Parkinson's and Alzheimer's, one cannot charge that science is willing to accept the use and destruction of human embryos for frivolous reasons in this debate.

But whether the reasons are adequate is a matter, of course, of tremendous controversy. Given the

years of practice debate regarding abortion there are two groups of people. They are not all the same groups but there is general agreement that we can describe two groups of people for whom the use of human stem cells for research and therapy presents basically no moral dilemma.

For those on the one hand whose religious and philosophical beliefs lead them to hold that a human embryo from the initial stage of a fertilized egg is equivalent to a human child there is really no moral struggle. No benefit to others, however great, can justify the sacrifice of a child's life. I understand and am sympathetic with that reasoning if that is what one holds that the fetus is the equivalent of a human child then that is the conclusion that one must come to.

For those whose religious and philosophical beliefs lead them to hold a human embryo at the initial stage of a fertilized egg and some time into development is equivalent to human tissue, is a part of the human's body, not unlike that of her kidneys or another organ,

then no serious argument can be found against using fetal tissue to address life threatening conditions experienced by children and adults. The logic of that argument also makes sense and I can be very sympathetic to it.

I envy people who stand behind either one of those positions because for them the moral issue has less ambiguity than it does for some of the others of us. There are some of us for whom the moral ambiguity surrounding the moral status of the human embryo looms large. Those who hold this view or this confusion, this confused view if you want to charge that, do believe that nascent human life is to be protected against callous disregard. They do recognize that the fetus is human life and they certainly acknowledge the potential of that life to come to term as a child and developing into an adult.

But there also is a recognition that a fertilized egg on the one hand and an unborn child kicking in the womb are not the same. Now the problem is the confusion arises over when has one reached the point

where the difference is critical but for all my religious, and if I could say personal experiences as a mother, I would have to say that I make a tremendous distinction between that fertilized egg for all the value that I give it and the life that then began to develop and be felt within me as my child came to birth.

In a like manner, if presented with a choice between the life of a human embryo at the earliest stages of development and the child that one rocks to sleep then I would have to say that the child would be given priority.

Those of us who hold their somewhat ambiguous view could not rightly be described as believing that human life begins only at birth but at what point and under what circumstances one can use, manipulate and destroy embryonic life remains an agonizing question.

When faced with this moral dilemma, what is for some of us a terrible moral dilemma for which it is hard to come down with a concrete comfortable decision, as Christians in the Protestant tradition, but I would

suggest as society at large, we need to avoid both legalism on the one hand and moral chaos on the other.

I will speak specifically as a Protestant in the reform tradition. I believe that the Christian obedience to God cannot be reduced to adhering to absolute principles or laws such as the absolute life of the fetus or in the abortion debate the absolute right of the woman to decide. I do not think that those adequately reflect for Christians our obedience to God. Nor can the consequences of one's actions be totally ignored even if they are not the decisive factor in moral action.

For one to be able to claim "I did what was right, I followed the law, I obeyed God," while remaining indifferent to the human suffering that may result from that right action is out of bounds for those who serve the Living Christ who would have us serve him by serving the least of the brothers of the sisters.

There are Divine commands. I do not reject that. But those commands can never be separated from a

story which nurtures them. They cannot become principles we adhere to apart from God's presence in the world on behalf of those who suffer.

Neither can we on the other hand approach each situation empty handed furthering the state of moral chaos, making up what we do as it suits our needs. In spite of the understanding that Protestantism emphasizes, the individual, it is not fair to a Protestant ethic to say that each individual then is just to follow his or her own conscience and make up the moral decision as they go along.

Rather in Protestant ethics Divine commands are nurtured in the context of the Christian story that gives us our identity so that all affirmations of faith are inseparable from our actions. What I mean by that is that we do not just go to the Bible to find what the absolute commands are but rather we read the Divine commandments in the context of all the stories and poetry and other aspects of Scripture, and we put that in conversation with the human story.

Carl Lemmin liked to say that it is only when the Biblical story is put in conversation with the human story that you then have the saving story, not these abstract principles or laws that one derives from the Bible.

My understanding of the incarnation of the freedom of God and other theological affirmations push me then as a Christian to think that we have to look at each particular case, not empty handed approaching it with our identity as Christians but not with this understanding that we have absolute principles that we can apply no matter what the situation.

The allocation of public funds, which is being addressed here, considered here for what public policy is going to be formulated in light of this issue, has to be sensitive. Those who are making those decisions about the allocation of funds have to be sensitive to public morality. But, of course, there is an absence of consensus and so the public policy makers need to negotiate between opposing views.

It is something like what Don Calvin talks about in the light of the church's polity that on the one hand we are called to be subject to the decisions of our brothers and sisters in Christ in the church while on the other hand Calvin says, "No one can bind our conscience." In a public secular way we are trying to negotiate the same thing. How can we be true to those whose consciences lead them to different conclusions on very serious issues?

I would echo what was said by -- similar to what Dr. Meilander said that in trying to negotiate those differences of conscience, one of the first things that we have to remember is that there is no room for self-deception. We cannot -- part of what that means is that we cannot caricature our opponents. We know that there are arguments which are alternately calloused towards the nascent human life or indifferent to the plight of more fully developed human life but there is no room to claim that all opponents on this issue are callous or insensitive on one side or the other.

Also, in terms of there being no room for self-deception we need to address squarely and honestly intentions behind -- issues such as the intention behind producing an embryo and how much difference does that make in the moral status of the embryo? I think that some of the arguments that I have read in trying to make these distinctions, what the intention and the originating -- what generated this embryo was human love and sex, that is different from if it was originated in the laboratory.

Finally, I think we have to be honest about those differences and say it is not -- it cannot be that clearly defined. That finally if you have an embryo how can its moral status be different in one case than it is in another? I think that we need to avoid the sort of deceptive language that has dominated both sides of the abortion debate. At the same time we can recognize, as many people have, that we are in a situation in which we are dealing with that which is liminal or that which has become odd in terms of what biology is discovering and

able to do and how we talk about the moral status of the embryo.

My recommendations specifically in light of the way human stem cells are collected, I would recommend the use of aborted fetuses. Abortion is presently lawful and as long as it is legal, it is odd to say that aborted fetuses can be discarded but not used in beneficial scientific research.

At the same time we need to take every precaution that the use of aborted fetuses for research into stem cells would not increase the number of abortions or make us look calloused for the destruction of nascent human life.

Similar arguments can be made about embryos left over in the procedures of fertility enhancement. If it is presently legal to discard these embryos, why should it be illegal to use them for potentially life saving research? At the same time we need to make sure that there is a purposeful generation of extra embryos for the sake of human stem cell research.

Generating embryos for the sole purpose of research is yet one step further into serious moral debate but it also takes us one step further into what the potential benefits are. Somatic cell nuclear transfer being used in this procedure increases the incredible benefits that could arise from human cell research and therapy.

I would propose that could be allowed but to a very limited extent, that only in the absence of any other possibility that we allow for the generation of human embryos for human stem cell research. When the creation of a human embryo can be avoided, it should be and it does seem to be that recent things that I have read are showing that there may be a way to carry forward with this stem cell research without destroying human embryos.

I do not believe that NBAC can negotiate between pro-life and pro-choice factions or between those with very different views of the moral status of the embryo but I do think that it is important how we define

what -- who you are negotiating between, which views. I would not describe it as negotiating public policy to represent those who stand differently on the moral status of the fetus, those who think that moral status is an absolute and those who do not. That is one way to look at it.

But I think, rather, it is those who put their compassion into protecting the moral status of the fetus and those who put equal compassion into promoting the well-being of those who face devastating illnesses so that both sides can be seen to have integrity.

My last sentence, we should not on the one hand let the wonder of scientific discovery make us more callous toward life at its initial stages of development, nor should we on the other hand let the fear of scientific discovery make us more callous to those whose suffering could be substantially addressed by that science.

DR. CHILDRESS: Thanks, Nancy.

Ron?

RONALD COLE-TURNER, M.Div., Ph.D.,

PITTSBURGH THEOLOGICAL SEMINARY

DR. COLE-TURNER: I want to thank the commission for the attention that you are giving today to the religious perspectives regarding human stem cell research and for the opportunity to speak before you. I come here as a member of a mainline Protestant denomination, the United Church of Christ, and while no one speaks for our church, I will try to represent the positions we have taken and the concerns that we hold.

Let me begin by saying that we have no official position about the status of embryos. That is not to say that we have no opinion or that we do not care about their rightful status before God. But, officially, we haven't never declared, for instance, that we regard embryos as persons. Some of our members would agree with that declaration; many, perhaps most, would not, believing instead that embryos have an important but lesser status. But we have, deliberately, I think, avoided any such declarations. On the contrary, we have

statements in which we express our openness to embryo research, given certain conditions which I will come to in a moment.

I quote at length from a report that served as the background to a 1997 General Synod, United Church of Christ General Synod, resolution on the question of human cloning. Beginning the quotation:

"Beginning with the 8th General Synod in 1971, various General Synods of the United church of Christ have regarded the human preembryo as due great respect, consistent with its potential to develop into full human personhood. General Synods have not, however, regarded the preembryo as the equivalent of a person. Therefore, we on the United Church of Christ Committee on Genetics do not object categorically to human preembryo research, including research that produces and studies cloned human preembryos through the 14th day of fetal development, provided the research is well justified in terms of its objectives, that the research protocols show

proper respect for the preembryos, and that they are not implanted.

"We urge public discussion of current research and future possibilities, ranging from the preimplantation genetic screening of human preembryos to nuclear transfer cloning to human germ line experimentation. We do not categorically oppose any of these areas of research but we believe that they must be pursued, if at all, within the framework of broad public discussion.

"In 1989, the 17th General Synod of the United Church of Christ stated that it was 'cautious at the moment about procedures that would make genetic changes which humans would transmit to their offspring, or germ line therapy...We urge extensive public discussion and, as appropriate, the development of federal guidelines during the period when germ line therapy becomes feasible.'

"We on the United Church of Christ Committee on Genetics are opposed to the idea that human preembryo

research, such as germ line experimentation or research involving cloned preembryos, should be permitted but left largely unregulated if funded privately or that there is no federal responsibility for the ethics of such research if federal funds are not used.

"We believe that this approach merely seeks to avoid the difficult public deliberations that should occur prior to such research. We believe that all such research should be subject to broad public comment and that it should only proceed within a context of public understanding and general public support."

And so when it comes to the specific questions before you in the commission regarding the ethics of pluripotent human stem cell research and federal policy in this area, my view is that it is broadly consistent with the views of the United Church of Christ that human stem cell research go forward with federal funds. In fact, we go further and encourage reconsideration of the ban on federal funding for embryo research. We are open to the possibility that somatic

cell nuclear transfer be used to create embryos for research, but not implantation, under highly defined research protocols, and that this research, too, be done with public funding.

One of the conditions that we attach to the possibility of this research is that a clear and attainable benefit, for science and for medicine, be indicated in advance. It is reasonable to think that now, with pluripotent stem cell technology, such benefit is becoming more clear.

Another condition we attach is that this research follow a period of intense and open public discussions. In fact, and let me be as clear as I can about this, all that I have said about our support for research in these areas is taken away unless the condition of advanced public discussion is met. I believe that this is especially important for this commission, because you represent one of the very places in our national life where such a conversation can begin.

We stipulate this condition for two reasons. First, we believe that there are enormous advances ahead for medicine in these areas of research, and that we have an obligation to work for these advances, but that our efforts toward that end could be undermined, that it could be very bad for science if research proceeds in the short term without broad public understanding and support. Public misunderstanding and public exclusion from discussion could result in public rejection of this and related forms of research.

The second reason why we hold that public discussion and support is a precondition is that we set enormous stock in the value of living in a society whose basic public moral decisions result from the deliberations of informed citizens. As an historic church, our congregational forebearers extended congregational decision making to the public square. As a church today, we believe that our views are not the only views worth hearing but that public policy on morally problematic issues should be the result of

honest, sustained discourse in which all views are brought forward and engage each other in public. This view of public society is an article of faith with us.

As a commission you are, of course, under a certain pressure of time to offer your report on specific policy questions. As a church, we offer at least some support for the view that federally funded research in embryonic stem cells, and possibly even in embryos, should go forward as quickly as possible. But on the basis of the condition our church has set on this support, I ask you to do whatever you can, in your report, to satisfy our condition by helping to bring about a new, open and sustained national discussion of these difficult questions. Such a sustained discussion may be well beyond your mandate and may require some new institutional platform but you are one of the key voices in our national life that can urge that this challenge be taken up for the good of research, for the good of public support of research, and for the good of the kind of society we want to live in.

I will conclude by pointing to two concerns that a church such as ours will bring to the discussion that I am urging you to help create. Both have to do with contextual factors, and the first of these is social justice. Precisely because this research promises so much benefit, we worry that the benefit will be distributed unevenly and therefore that it will further privilege the position of the rich and the powerful at the expense of the poor and the weak. We believe that the moral test of any system, including our system of medical research and treatment, is how well it treats the least privileged members of society. First of all, within our own nation but also on a global level. And so we would challenge those who fund and develop these therapies: How will the benefits be shared universally?

We are not unaware that there are difficult problems of delivery and cost recovery but when we offer our support for this research because of the promise of medical benefit, we do not mean that the benefit should be distributed only by means of the market.

The second concern has to do with the broader scientific and medical context of research. Human stem cell technology does not come before us today in a vacuum, and it is impossible for any of us to offer a moral assessment of it in isolation from other current or pending areas of research, among them somatic cell nuclear transfer and human germ line modification. Through these technologies, through the combination of these technologies, we human beings are about to acquire a wholly unprecedented level of control over our health, our longevity, and our offspring. And so I urge you to do whatever is in your power not only to create broad public discussion, but to define its agenda broadly as having to do with this wide but interrelated set of emerging technologies.

I conclude with a simple observation, one which I think is brought out by the experience here today, that if the question before us is narrowly defined as having to do with embryos and stem cells, the religious traditions will take different positions.

But if the question is framed in terms of concern for social justice or for our ability to chart a common future in view of the overwhelming changes that lie ahead, the religious traditions will have much on which to agree. If that is correct, then it may turn out that greater understanding on the narrow issues might be found along the pathway of greater engagement on the contextual issues.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thanks, Ron.

Commissioners, it is open now for questions or comments going especially to the Protestant tradition. Larry?

DR. MIIKE: That was such a great range. Rather than ask a question I think I will comment on my personal opinions. I think as a public policy body we have to do a balancing act which means that we cannot take extreme positions so the question is what is the right balancing act.

The way I see it is that in terms of aborted fetuses and IVF excess embryos, I feel comfortable with it. I have trouble from a general stance in terms of creating embryos for research. From a public policy stance I have a lot of trouble with that at the moment.

I, also, have a social justice objection to the use of somatic cell nuclear transfer and my reason is technical in the sense that if we deal with creating resources from embryonic stem cells that are applicable to everybody it is going to be more available but the somatic cell nuclear transfer one is an individual one and I cannot really see that as being available to a whole range of people.

The other side is that let's not forget that this whole debate is about the fruits of the research that it leads to. So the kinds of things that you people think that should go forward, which is -- and I asked the question of the technicians, of the scientist once, was that I assume that in this whole range of research one would try to do it backwards. In other words, a

differentiated stem cell in the blood or in the nerve, being able to get it backwards. That has to be part and parcel of any of the research so that the research package should not just concentrate on fetal sources of stem cells but the whole stem cell area.

And I think that is the only way from my way -- that I can feel comfortable that we can fail to see how -- how in these areas it is going to be fruitful research and that we can move step-wise from that. And I think that is the approach we took in the cloning situation because our lynch pin at that time was to say, look, let the moral debate settle down, we are concerned about the whole safety issue in the beginning and let's see how that turns out before we begin to incrementally face other questions.

So there is that -- personally it was just sort of a reaction to that.

DR. CHILDRESS: But are there any responses?
Gil?

DR. MEILANDER: Well, a word in response. I mean, I guess I would want to urge you to keep on thinking about what exactly the role of NBAC is. If it is just a public policy question then our elected representatives may be the best persons to deal with it. But you may be in a position, while of course having to think about divergent views within society, to offer some sort of guidance that is not in itself just the same kind of deliberation that elected representatives would do but that, you know, aims at trying to help form moral opinion on it. It would not seem to me to be inappropriate.

I would not mind it at all if NBAC did it even though the truth of the matter is if NBAC did it they would probably, you know, do it in a direction that I would not agree with it but I still think that your charge ought to go a little beyond thinking of yourselves simply in terms of --

DR. MIIKE: You are correct. What I should have explained is that I see myself as a public policy person. I am not an ethicist. I am a public health --

public health -- public policy side and that is the kinds of discussion we often get into.

Right, Jim?

DR. CHILDRESS: Right.

DR. MIIKE: I think Eric would agree with me that he is also sort of coming from where I am.

DR. CHILDRESS: Eric?

DR. CASSELL: Gil, I understand that one of your objections to using embryos that are created during the course of in vitro fertilization but not implanted is that that encourages the use of -- you know, it is a sneaky way for people to create other embryos and it creates an irresistible desire to do something wrong. And is that generally it? Because if that is it, I once wanted to redo my house, which had been a boarding house, and the building inspector said it created an irresistible desire having sinks in the rooms to run an illegal rooming house. We resisted that.

I mean, sometimes people are able to resist things like that. In fact, one of the things

commissioners do is figure out ways to put oversight over the use of embryos and from which there is already precedent in other countries. So if that is it that would help me understand it.

DR. MEILANDER: I do not think I said that is it. That is an issue I raised in my third and last point about simply encouraging you, whatever you decide to do, and as I said, I mean, I predict that what you will decide to do is not what I would decide to do; that you help the public discussion be really straightforward about this and I think it is undeniable -- I gave you a footnote in my paper actually from someone who certainly does not hold my views on the question who notes this, that excess embryos will be created, I think, is almost unenforceable that you would not. So, I mean, that is one issue.

But I, of course, wholly apart from that issue, which I raised in the third sort of issue point about truthfulness, I think that the use, which means the destruction of those excess embryos in order to derive

the stem cell, that that would be wrong, also. So, I mean, there are two separate issues at work there just as perhaps -- I do not know, there might be some things you just should not do to your house, period, wholly apart from whatever -- what other --

DR. CASSELL: Well, that is what I am trying to find out, what I should not do and what is irresistible --

DR. MEILANDER: You should not turn it into a brothel.

(Laughter.)

DR. CHILDRESS: I know Ed is on the list. Let me get Arturo first and then turn to Ed.

DR. BRITO: This question is directed really to Dr. Duff because of a comment you made but I would appreciate any comments on this and I have raised this before, and I feel very alone in this point of view and I am not sure why but let me try it again and let me see if anybody else follows this logic. But you mentioned that you recommend the use of aborted fetuses for this type of

research as well as IVF created embryos. But when it comes to somatic cell nuclear transfer it is allowable to a limited extent. That is correct, right?

What I find is there is -- I find that it is almost hypocritical here with this way of thinking, which I think most people that are in agreement with stem cell research probably think in this manner, is that when we did the cloning report our emphasis was on a concern for the safety of a potential child so we really were opposed to any intention to utilize somatic cell nuclear transfer with the intent of producing a human being. But we were not opposed to cloning technology and I think most of the opinions were in agreement with that.

And given that somatic cell nuclear transfer is less natural, and I am going to put natural in quotes here, is a less "natural" method of reproduction than other methods, and it also has not been proven in human beings to be successful, why is it more logical to utilize in your mind a being that had the potential for

human life and not one that we do not know what that potential for human life is?

Do you understand the question?

DR. DUFF: Oh, yes. I think it is a very good question. I think on the first two as far as aborted fetuses and those extra fetuses, fertilized eggs in IVF, it is just -- it is almost a matter of practicality in law. If law allows for the one it is incomprehensible why it would not allow for the other which will lead to potentially such benefit. Now at the same time I would want to qualify those as I tried to do. I want there to be fewer abortions and I would want them to have fewer left over IVF embryos.

But as far as then the status of an embryo that is a result of somatic cell nuclear transfer we do not know but I would err on the side, and I think science may too, of saying it is a good possibility that it is the equivalent of a human embryo fertilized in vitro or in utero that we may not know but I think that it is a safe assumption that they are awfully close.

DR. BRITO: But here is my point, but then I think it would be easier to regulate to say we can utilize that created embryo for somatic cell nuclear transfer up to a certain point than it would be easier to regulate the use of embryos derived from excess embryos in IVF and from electively aborted fetuses.

DR. DUFF: Absolutely.

DR. BRITO: So, therefore, we are talking about practicality. That seems to be more practical to me.

DR. DUFF: Right. No, I agree. In all of the cases I would urge that there be a speedy -- an attempt as possible to find alternatives to any of the different approaches.

DR. BRITO: Sure.

DR. DUFF: So that it seems to me that there are -- there is great evidence that one might finally be able to have human stem cells without resorting to any of those resources.

DR. BRITO: Thank you.

DR. CHILDRESS: Ed?

DR. PELLEGRINO: I think it is very wise that there is someone in public policy who is not a bioethicist on this group. It is refreshing.

But I wanted to ask you a question looked at from a public policy point of view, how do you see the relationship between ethical questions and public policy? It is a part of a more general question. Hearing around the table -- I get the implication at times that if it is legal it is ethical and I know everybody -- actually I get the implication. And, also, we have the question of economics and ethics.

Now leaving those aside -- but I see this as kind of a type situation -- do you think good public policy proceeds following trying to decide what is good ethics or do you think public policy has a life of its own? What happens when they are in conflict? Which takes precedence, public policy or ethics?

I ask that question because we are dealing with managed care today in which economics drive the

health care system rather than the ethics of the care of human beings drives the system. So that is why --

DR. MIIKE: Yes, my personal opinion is that I think a great part of the revival of an ethics commission is to put more of an ethical perspective into the public policy decisions. So much of public policy is compromised in practicality and we need some more basic foundations in that discussion and a lot of times when we try to introduce that people do not like what we introduce.

DR. PELLEGRINO: Right, right, that is why I asked the question.

DR. MIIKE: So I think that this is an attempt to reintroduce an ethical perspective into the biomedical side. You have seen that, the revival now again in our last report and all the reports that are coming out about research among the mentally ill with diminished capacity. So, again, as I said, unfortunately public policy decisions go on, on a practical basis, and

it is compromised politics, and what we are trying to do is introduce a solid foundation.

DR. PELLEGRINO: No, I understand that. I am looking for the proper ordering between them because it might follow from that that maybe -- forgive me for the boldness -- it might be more appropriate -- most appropriate for this group to define what they believe to be the ethical issues. I might not agree with it, that is not relevant, and leave to the legislators the question of public policy.

DR. MIIKE: Oh, I think --

DR. CHILDRESS: Except that we have been asked, in part, to reflect on ethical issues regarding public policy, which is to say regarding questions of funding.

DR. PELLEGRINO: Yes, I know, but --

DR. CHILDRESS: That is the context so when questions come shaped and formed, and they obviously, in part, dictate the answer and, in part, dictate the way in which one looks for ethical perspectives on these.

I think you are right that -- here speaking personally and not someone chairing this meeting today -- that ethical questions can arise in a variety of contexts and if we all had in our society an agreement about exactly how to go about determining ethical answers and if we had agreement on the standards and so forth then we actually would not be raising some of the questions that we have to raise in the context where there is disagreement about those things and trying to figure out a way then to work out an appropriate social ethical response to the kind of debate that we currently have about this particular kind of problem.

So I think it is a pretty complex question and not a simple one about sort of get ethics right and then go to public policy. I think, there is a --

DR. PELLEGRINO: Well --

DR. CHILDRESS: -- of ethics, in part, as to what one will end up saying.

DR. PELLEGRINO: Well, I dissected the question to put the question.

DR. CHILDRESS: Right. Obviously the relation is more complex.

Laurie and then Eric.

DR. ZOLOTH: The -- I just wrote a note to Margaret that raised the question of what we thought God intended by having this much disagreement among people who take God very seriously and what I think is important is this is the very beginning of this discourse. None of us even had a chance -- maybe in our longer papers we do -- to address the significant safety issues that dominated the cloning debate that ought to be paid attention to and would have theological and ethical implications for this research, too.

These cells work so nicely because they are -- they mutate. We call that differentiate but they also mutate and they are -- they have an altered chimeras structure. They are immortal. Which are the same two things that cancer cells do. We do not know the implications of that research even for what seems to us -- even after we might address the origin questions, the

next questions of context, the daunting questions of justice that really haunt all of our papers.

DR. CHILDRESS: Indeed.

DR. ZOLOTH: And the inequality of health care. The limited access to even immunizations in this country right now. That haunts all of it. But beyond that there is the reality -- the pivotal moment is really -- is really animated by the pivotal danger. It is entirely possible that this research that looks so tempting and compelling now might lead to something quite devastating in 20 or 30 years after its implantation takes place and, in fact, that would have significant religious -- as we religious take a moment to consider as well, in the way that DES has implications. So I think that there is just -- we are just beginning the discourse.

It needs to be ongoing and many people have suggested for an ongoing look at emerging technologies in addition to NBAC's work, that there be separate and distinctive panels like IRB's for ongoing research. I am

particularly aware of this because of the tricky issues of common interest if it is privately funded that the Geron Ethics Advisory Board found ourselves in.

So I would really urge you not to stop only with this but to do the imaginative work and the worrisome work of what the implications of this research will be even if we could get it --

DR. CHILDRESS: Kevin, then Gil?

FATHER WILDES: I just want to get back to the general discussion of policy and ethics. I would just add that I do not see them as so distinct in a certain sense because I mean my allegiance in a certain sense is to Aristotle who saw ethics, politics and rhetoric of a piece, practical wisdom. So it is not like you get the ethical answers right on one side and then bring them into public policy.

I think the dilemma you face -- really that we face is enormous in a certain sense. Within religious traditions, for example, there are differing views about this. You can only imagine when you now move this into a

larger national debate -- I think I keep -- there is a recurrent theme for me that one of the great ethical and policy questions for us is how do we build public policy in a nation that is morally pluralistic and diverse in its views?

DR. MEILANDER: This is back to Dr. Brito's comment and perhaps a little persnickety in some ways but with respect to your earlier cloning report, I want to make a point that sometimes a certain kind of momentum develops in certain directions. I have defended that cloning report against -- to certain people who more or less tend to agree with me on a variety of matters who held that it really only said, you know, no to cloning that was intended to implant and try to bring -- gestate and bring to birth. And was approving towards cloning simply for the purpose of embryo research.

And I almost understood you to say that before. I mean, I read the report, although I can certainly be instructed on it, as having said simply we present from that question there are certain regulations

in place right now and we present. That, to me, has to be read as presenting, not as approving, though not common, and it may seem excessively persnickety but I think it is worth -- it is a point worth making.

DR. CHILDRESS: I think you are right. I think Arturo is trying to work out now independent of that the kinds of ethical issues that would arise from taking one of these different approaches.

Eric?

DR. CASSELL: Well, I am struck as I listen about the intent by virtually everybody who has spoken to widen out the nature of the deliberations and I think that that is a very important aspect of this.

As long as it stays on the narrowly focused question of is it or isn't it, what is it and can we touch it or not touch it, we lose the real social issues that go beyond that. That does not mean that that wipes out those questions but it changes them to talk about the larger social issues that surround the use of this research.

We have come to accept in this country that research is good in and of itself, that no matter where it goes it is always a wonderful thing, and so, you know, is always bursting up through the -- like plants through the ground. But -- and without beginning to raise those other issues in bodies like this I think it is time that we did that and that if we did do that we would serve a purpose, an important purpose.

DR. CHILDRESS: Margaret, and then Larry.

DR. FARLEY: This may widen it, too, but every group I know who has worked on issues like this separate out the issue of creating embryos for embryo research or stem cell research or whatever, and creating does not mean live somatic cell transfer, you know. It just means I will do a few more in the IVF process that does not have anything to do with an attempt at assisting reproduction.

And I think it is worth thinking about why there is so much unease with that. You said, well, the moral status of the product is going to be the same. I

assume, yes, that is probably true. So then why the unease?

I mean, is it because we think there is an implicit limit set to how many of these things we can do if we only use things that are left over from something else or is it because underneath there is an unease about really creating human life for the purposes of research, not using what we have, whether it is our own cells or left overs? I do not know.

I do not know the answer to that but I think it presses the imagination in terms of saying what is going on in the sort of collective psyche of our society about those, not that the whole society is talking about this but you get a fair sampling in different groups that work on these. And everybody wants to stop short of that and I do not think it is just because they think it is more controversial. I think it is because they do not know what to do with it.

DR. DUFF: And I was really trying to suggest -- I do not stop short of that -- I share the disease, the dis-ease (sic).

DR. FARLEY: Well, I am not advocating it or opposing it. I am just saying there is something here that gets us out of the usual debates and says what is everybody worried about and should we be worried about it.

DR. CHILDRESS: Larry?

DR. MIIKE: I will not answer that question.

DR. CHILDRESS: Oh, no. You just got the final word.

DR. MIIKE: I just want to say that I did not mean to say that in public policy decision making the ethics underlying the decisions are not playing a part.

I think that a commission such as this and all the call for more public discourse so people can understand is that we are trying to make it clear about what these ethical issues are that are underlying these

and, unfortunately, the way that we get most information is about a 15 second sound byte on some TV station.

DR. PELLEGRINO: Join the club.

DR. CHILDRESS: And from the session this morning it has given us a lot more than that and we are really grateful to all of you for taking time in your busy schedules and preparing the oral presentations and the written ones, and we look forward to getting a written statement from any who were not able to provide them today.

The session will continue this afternoon and all the panelists are warmly invited to continue with us on that. We will have a period for public comment and then discussion among the commissioners and you are welcome to again be at the table and join us in that.

Before we break, though, let's get LeRoy or Kevin or Ed or some of the locals to tell us the best place to get a quick lunch so we can be back, what should I say, 1:30. We will start at 1:30, which is just an hour-and-five or seven minutes.

DR. WILDES: The best single place to go which has several things is the Leavy Center and there are maps out on the table.

It is about a five minute walk up campus and it has got everything from fast food to you can actually sit down and eat a meal so that is probably best.

(Whereupon, a luncheon recess was taken from 1:20 p.m. until 1:43 p.m.)

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A F T E R N O O N S E S S I O N

DR. CHILDRESS: The first item on the afternoon's agenda is public comment. And we will hear first from Dena Davis.

Dena?

PUBLIC COMMENT

DENA S. DAVIS, J.D., Ph.D.

DR. DAVIS: If you cannot hear me please say so. My name is Dena Davis. I am from Cleveland Marshal College of Law and I am speaking to you today as a scholar of religion, not as a member of a particular tradition, and I very much appreciate this opportunity.

This will be a very short statement but I am going to take it slowly because it was a different statement at 8:30 this morning than it is now. So now it has all kinds of scribbles on it and I need to read it slowly.

Given the close relationship between research with stem cells and issues having to do with the moral status of the embryo and giving the wide diversity of

passionately held views on this topic, I think it is a given that we will not be able to resolve the topic before us to everyone's satisfaction.

Some people will inevitably be disappointed because their views were not persuasive and did not rule the day but it is extremely important that those people not also feel that their views were trivialized or that they were not taken seriously as thoughtful persons.

Our goal, it seems to me, is to do as much good science as possible in a way that is as inclusive as possible of the wide range of beliefs in America and that enables those that are ethically opposed to parts of this research to participate to the greatest extent possible. And to this end I will make two points which go with two suggestions.

First, I very much hope that NBAC does not adopt the kind of reasoning exemplified by the letter of legal counsel, Harriett Rabb, to Dr. Varmus, stating that research on stem cells derived from human embryos is not against current law as long as public funds are not used

in the derivation and destruction process. Ms. Rabb's letter may be defensible as legal reasoning but as ethical reasoning for me it does not pass the straight face test and simply excludes ambiguity of language to frustrate what I, and I think almost every other American who reads the papers, would have assumed was the clear intent of the law.

I think that the likelihood that NBAC would go down that road is much less so this afternoon than it was before we all got started this morning after the very many rich presentations that we have heard today but in case that temptation still exists I would like to urge against it and I would like to second what Professor Meilander said about the importance of being clear and accurate before a public discourse.

Second, I hope that NBAC will handle with great respect and sensitivity the complicity issues that confront some persons in view of publicly funded embryo stem cell research, and we have heard about many of those today.

If I were a traditional Roman Catholic, for example, taking one perspective of that tradition, I would not accept the suggestion that moral issues are addressed as long as public funds are not used to actually destroy embryos.

Although for some people the assurance that only "spare" embryos would be used that would have been destroyed in any case makes this practice acceptable. For others, as we have heard from Dr. Pellegrino, for example, important complicity issues still exist. For example, some people may be concerned that involvement in embryo stem cell research would dilute their ability to condone the destruction of embryos or even to condone the entire practice of IVF.

I have always thought that the respect a person commands as a moral being is directly tied to her sensitivity of issues of complicity. If a person told me that she was passionately opposed to the tobacco industry on ethical grounds, it would be insulting for me to ask her to buy stock in Philip-Morris. That person would

rightly think that I did not take her initial ethical stance very seriously but thought of her as the kind of person who would just look the other way when it suits her.

By the same token, I think it is disrespectful to suggest that those who believe that human embryos are persons look the other way when embryos are destroyed to obtain stem cells as long as public funding only kicks in once the stem cells are derived.

It seems to me to be more respectful, both of individuals opposed to the research and the public discourse generally, to be explicit about what is going on here and to acknowledge the ethical if not legal linkage between embryo destruction and the deriving of stem cells. If we as a society decide to go ahead with research on stem cells derived from embryos and/or from aborted fetuses it will be because opposing voices to quote Margaret Farley were not persuasive, not because important issues did not exist.

I do not share the ethical perspective on the moral status of the embryo of those who call for stringent protection of very early human life. Thus I cannot presume to say what stance those believers should take on the destruction of embryos to obtain stem cells. We have heard that for some people this will be more acceptable than obtaining them from aborted fetuses while others take the opposite view and others argue against obtaining them from either of those resources while still others may find that in good conscience they can make use of stem cells derived from both sources.

Many of these decisions will depend on other elements such as the thoughtfulness of the policies and regulations surrounding the derivation. Thus in order to facilitate the fullest possible participation in research by people and institutions of all religious and ethical perspectives, I suggest that stem cells be tagged in such a way that scientists and institutions can identify those that were derived in ways that are not offensive to their religious beliefs.

I understand from the scientists to whom I have spoken that this is not at all difficult to do. The analogy is a little like labeling clothes in stores so that those of us who wish to restrict our purchases to clothes made in America or only by union labor or who wish to boycott a specific country of origin can do so while others are not restricted in their purchases.

In the same fashion, some persons and institutions will feel comfortable with stem cells derived from fetal tissue but not from embryos. Others from stem cells derived from embryos but made into immortal cell lines like our Orthodox colleague this morning and so on.

Appropriate tagging signals respect for the seriousness of their views and invites their participation to the extent possible.

Thank you.

DR. CHILDRESS: Thanks very much. Did you have written remarks? Just stay for a minute and see if there are any questions. If you could --

DR. DAVIS: I will send you the written one.

DR. CHILDRESS: If you could.

DR. DAVIS: It is all scribbled at this point.

DR. CHILDRESS: All right. Let's see if there are any questions from commissioners or from panelists who participated this morning. Questions or comments?

DR. MIIKE: I think on the last point. From what I understand, the pedigree of the stem cell line is important scientifically so it should not be --

DR. DAVIS: That is what I was told. In fact, they are tagged anyway for other reasons.

DR. CHILDRESS: Other comments or questions?
Thank you very much.

Oh, was there one? I am sorry.

DR. ZOLOTH: It is important to make a distinction, or is it, between doing the basic research, the cellular research that will enable us to figure out the use, which has to be carried on before you can get to

the second step, which is the actual use, and you have suggested some very good ways to regulate and mark the use in a pluralistic society. I was wondering if you had thought about ways to do the same thing at the level of basic research before it becomes an issue of use when it is just an issue of how the basic research is funded.

DR. DAVIS: You mean whether or not it ought to be publicly funded? I mean, I personally think it should but that is not the point I was making today but I gather just from -- even if I had done nothing on this but come here this morning absolutely fresh I would have heard maybe 12 different views on sort of mix and matching of what is and is not acceptable, both in terms of derivation, in terms of the amount of time that went on and so on.

And what I would like to see is that as many people begin to get involved as possible so at various stages, and I do not have really the scientific technical expertise to know how that would be done, at various stages to make it possible in the same way that, you

know, when I go buy and clothes that knowing which ones are not union makes it possible for me to buy clothes with a relatively clear conscience.

Thank you.

DR. CHILDRESS: Thank you very much.

The second person to offer public testimony is Richard Doerflinger.

Please come to the table.

RICHARD DOERFLINGER

DR. DOERFLINGER: Well, I thought I heard my name this morning and I figured if you have a short list of public commenters I might come in at this time for rebuttal.

Professor Farley has said that there are a variety of views among Catholics on the issue and as a sociological proposition that is undoubtedly true. I hope I am not stating something that is overly obvious to everyone by saying that it is not the same thing as saying that there are a variety of equally normative or equally valid Catholic positions on the issue. That is

the Catholic church in its ecclesiology has a teaching authority whose job it is to pick among those which are authentically Catholic and have grounding and those which are not. It seems to me that in that ecclesiology the teaching that has been rather solidly proclaimed by all the bishops and by the Popes, especially the current Pope, and even generally *vitae* is fairly firm in the kind of moral respect that the human embryo at every stage deserves.

As a sociological proposition, however, I think that Professor Farley's position would be at one end of that spectrum. I studied the past writings on the termination of pregnancy in the third trimester. I think if you did an opinion poll on that among Catholics or the general public there would be little support for any third trimester abortions.

The ad that she signed back in 1984 sponsored by Catholics for Free Choice designed to raise money for the organization was looked down upon by moral theologians at every part of the spectrum in the Catholic

community and, frankly, were -- the Catholic Bishops Conference, they were a bit put out at the association with that group because it is not a Catholic group at all and has a closer association with the abortion industry than it does with the church.

A typical quote from the founding director who previously was founder of the Trade Association for Abortion Clinics in the United States was, "I went looking for a government I could overthrow without getting arrested and I found the Catholic church." That is not somebody who is trying to -- that is not Professor Farley obviously. That is the director of Catholics for Free Choice. That is not -- that is not an authentically Catholic position.

Professor Farley's other involvement has been with helping to write the position statement on what was called preembryo research on behalf of the American College of Obstetricians and Gynecologists, which obviously has disagreements with the Catholic church on abortion as well. But that position paper was strikingly

similar to what ultimately came out as the final recommendations of the NIH Human Embryo Research Panel, which then went to Congress, not a Catholic congress but rather a pluralistic congress, which resoundingly rejected that view as a representation of the pluralistic views of the voters and taxpayers. So I think we need to put claims, sociological claims about degrees of adversity and pluralism in some context based on past history.

My only other point is this: The alternative Catholic positions that have been cited here, positions by Father McCormick, by Tom Shannan and so on, were of course based on the embryology textbooks that existed at that time, which did use the term preembryo. Those textbooks have now been rewritten and henceforth the theology has to be rewritten to accommodate the fact that the term "preembryo" has been dropped from recent editions of those same textbooks and in some of those textbooks, like the one by Ronan O'Really (?), is

explicitly called a discarded and discredited term that has now been abandoned by most embryologists.

The reason for that abandonment is about the same as was the reason for the Human Embryo Research Panel even far back in 1994 to reject it. There was a great deal of new embryological knowledge coming forward contradicting previous information or rather clarifying it because the previous information was based on amphibian embryology and people started looking more closely at the special character of mammalian embryology.

And those findings have indicated some new things about twinning; that an embryo's ability to twin spontaneously probably is determined largely at or shortly after conception by factors like the thickness of the zona pellucida. The vast majority of embryos never have the ability or the inherent potential to twin. You can go in and manipulate them to make them artificially twin but if that means the original embryo was not an individual we have a little problem because with a little extra manipulation you can do the same thing to a cell of

your body or mine and make a new individual and that will mean then that none of us are individuals either if you can artificially manipulate a cell from us in order to make a new one.

Finally, I just need to say something about what is -- Professor Farley's testimony about the centuries-old Catholic position that a certain amount of development is necessary in order for a conceptus to warrant personal status. The certain amount of development was seen as necessary because nobody knew about the existence of the conceptus. They thought we were talking about a situation in which a male sperm was the only formulative factor and it had to over a progress of time form stupid inanimate female matter -- yes, there is some patriarchal sexism in the church but this is an area where we move away from it -- that it had to form this inanimate matter from the woman into something that would be ready to receive a human soul.

To a large degree this position based on faulty biology was abandoned in the 19th Century at the

same time that the secular medical profession was calling for changes in the abortion laws to move protection right back to conception based on the discovery of the ovum and the reality of conception as a new and unique event.

So I do not think that the bishops are going to apologize for not using 13th Century biology or Fifth Century B.C. biology. I think the evidence -- the embryological evidence, quite aside from the moral question, is was clear in 1994 but human development is more of a continuum than we once thought and the evidence has grown further since then.

DISCUSSION WITH COMMISSIONERS

DR. CHILDRESS: Thank you.

Any responses?

Margaret?

DR. FARLEY: Yes. Just to show that we are part of a community of discourse, let me just make a couple of quick responses. First of all, I think you are right, the general public probably has not thought about stem cell research or even about embryos very much in the

Catholic community. Certainly we have thought a lot about third trimester abortions and so on but I am not sure how I see that as relevant.

So my point was not a sociological one, how many numbers of Catholics think of this or that, nor did I have at all Catholics for Free Choice or any other similar organization, pro or con, in mind in the statement that I was making about diversity in the Catholic community. I have no connection with Catholics for Free Choice, never have had one, et cetera. I am in opposition to the interpretations that you and others have given of that.

But what I did have in mind was a growing number of moral theologians who are working within the church trying to serve the church and who are persuaded by the case -- one of the cases that I gave as opposed to the other.

And then lastly, I guess, I would say about the information from embryology. I, of course, am giving that a large role to play in the construel (sic) of the

one case that I favor and others do as well, who use -- who would take that position.

But what I would say about that is that, first of all, I did not use the term "preembryo." I am as aware, as you are, that is an outdated term. Although I think that the change of the term had to do with people's disagreements with its implications of a different moral status than what they thought what was originally called preembryo and embryo. They wanted the same moral status for the whole continuum, et cetera. And so the term has been dropped but again, as I say, I did not use the term.

As far as the whole tradition, I think what you have said is very helpful actually. I agree that some centuries ago the Catholic position about the necessity of development before you get an entity that can be called a person was based on bad biology, no biology, human instinct of a sort I suppose, and then we learned a lot more, and I think what we learned helped to support the position, which is now what I described as

the position against embryo research because we did learn about conceptuses and fetal development, et cetera.

But I guess my only position and what I think undergirds the position for embryo research is one that says now we have learned even more from embryology and what we have learned more is suggestive of the position that we do have a different moral status in the very early stages. So -- and this also reminds me of an interchange I had with Dr. Miike earlier.

The Catholic tradition as much as the Jewish tradition and I actually think the other traditions as well, takes very seriously the input of science. You cannot have a natural law perspective without taking that because that is one of the ways we come to understand concrete reality, as I said.

On the other hand, that does not mean that what science teaches us is necessarily determinative on every issue because we do not know everything from science, just like we do not know everything from Scriptures as a matter of fact.

So I think the point you are making is a good point but all I would say is I think the history that science has changed and taking into account now accounts for these two positions and my own reading of it would be that the position for embryo research is based on more recent science than the earlier one.

DR. DOERFLINGER: May I?

DR. CHILDRESS: Please.

DR. DOERFLINGER: I would be happy to provide you with the documentation for what I mean as the most recent research, some of which is found in the January 1999 issue, the 25th anniversary issue of Cell. Some of which is found in three different 1998 edition embryology textbooks. If you have something more recent than that I would like to look at it but this is seen as the cutting edge among the embryologists that, for example, the significance of the primitive streak has been greatly demoted now because it is now a consensus among embryologists that at least the mammalian embryo has a very definite spacial orientation.

It essentially knows which way is up, which way is right and left to a degree -- at the earliest stages to a degree that was not thought to be possible a few years ago. People thought that until the time of the primitive streak this was largely a disoriented mass of cells.

The major article in Cell from January indicates that, in fact, outer cell wall of the blastocyst that people tend to dismiss as just an mass of inert of outer cells is sending signals that determine the bilateral symmetry of the embryo very early on.

And there is -- one of the leading British embryol R. L. Gardner, thinks that the spacial orientation of the embryo is actually determined at conception by the point where the sperm hits the egg. In other words, where the primitive streak is going to go is already laid down in the initial act of fertilization.

So I am not saying that this determines a moral judgment. I am saying that some of the distinctions that people have tried to make as morally

significant markers at which the embryo becomes something qualitatively different later in development are having a lot of holes blown through them and I think that the holes are being blown by the most recent research.

The report you co-authored in 1994 did use preembryo.

DR. FARLEY: Yes, that is right but it was a going term at that time.

DR. DOERFLINGER: But even at that time --

DR. FARLEY: It is now outdated.

DR. DOERFLINGER: -- April '94, the Human Embryo Research Panel, which maybe had a little more information than that, was calling it -- well, Kenneth Ryan, the co-chair of the Scientific Issues, was calling the term ridiculous. But I think the developments since then have made it more so. I will not say ridiculous but --

DR. FARLEY: That document, by the way, was written by -- had input from a number of Catholics, which is --

DR. DOERFLINGER: Sure.

DR. FARLEY: -- also makes my point about diversity but I do not -- I, myself, at least do not want to argue the science at this point. What I would like to say, though, is that in part it is a matter of interpreting what the science means and what it says to the commission is that the commission needs to take account of the science as well as more interpretation of its meaning.

DR. CHILDRESS: Nancy?

DR. DUFF: I have two comments. One as a Protestant professor of theological ethics, I have tried over the years to resist the Protestant temptation to present to my Protestant students that there is one uniform Catholic view. I am not talking about the sociological -- that there are sociological differences but that there is this one set Orthodox view. And over the years I have tried in my courses to give a fair representation of Roman Catholic argument by giving very traditional ecclesiastical views and also views from Roman Catholic

moral theologians who are hardly radical but they still use Roman Catholic moral reasoning to come up with slightly different views.

So that I am concerned if now perhaps your comments are suggesting that I should go back to teaching my students the Protestant sort of caricature that there is only one view.

I have one other comment and that is to the committee. Part of what I was wanting to say in my comments that I might not have said entirely clearly but it is with all due respect this sort of attitude and language that I hope that we can get out of the debate. I think you have a serious responsible position that is worth listening to.

I think that the kind of value that you place on fertilized egg as human life is something that I have to hear and be challenged by but I also think that you can defend that and I can listen to it without turning around and assuming that anyone who disagrees with that lacks integrity or proper scholarship; that we need to

stop the name calling and say that there are people on varied sides of these issue who have very compassionate commitment to the Christian faith and these issues.

DR. DOERFLINGER: I would like to refer back to the transcript. I do not recall calling anybody a name.

DR. DUFF: Well, tone alone communicates the name calling.

DR. DOERFLINGER: Well, the tone is from the fact that --

DR. CHILDRESS: Kevin?

DR. WILDES: I would just like to make two observations. One is -- perhaps it is an in-house or exterior clarification but I think that there are serious theoretical questions about how one interprets a moral position within the church and the ecclesiology one uses. I think that it is fair to say that there is not just one ecclesiology at least for the Roman church at this time.

And oftentimes the assumptions one makes about the ecclesiology then shape the position one takes

on the moral -- there is an interrelation between the two and I just think that that is worth pointing out at this point.

The other thing is on the science, this is obviously an area of development, and I think you are right to point out that the issues around the question about the language and the preembryo, but I think we should be cautious because, as somebody who -- when he used to do legitimate scholarship did philosophy of science, I would point out that the science -- you know, if science could tell us the answers we would all be out of business. It needs -- facts need to be interpreted and that is an important part of the evolution of scientific knowledge as well.

So I think it is important to keep in mind as we look at "embryological facts" that they need to be seen as part of an interpretive structure. And that is, in fact, where I think the rub is on this issue, is there are different interpretive structures at work.

DR. CHILDRESS: Ed, and then we will see if there are any other people who need to offer public testimony.

DR. PELLEGRINO: This is very brief. I will comment on the discussion. I just want to respond to your response. I think sometimes people misunderstand sharp and genuine differences of opinion for personal insults. It is not the case. And I think one of the -- I think the essence of dialectic after all is one position counts for another and how to examine the arguments for each. So I would like to say we ought not to in the interest of peace give up dialectic. I do not think he was saying that.

DR. DUFF: Of course not.

DR. PELLEGRINO: It is a danger.

DR. DUFF: But can't we have serious, really serious disagreement and debate where we even are angry with one another but do not discount who one associates with, what their scholarship is or assume that they are not

operating from a very thoughtful -- you did not hear that in his comments.

DR. PELLEGRINO: No, I did not.

DR. DUFF: I guess, I did.

DR. PELLEGRINO: I did not hear that from Dr. Farley this morning when she was taking a different position from mine.

DR. CHILDRESS: All right.

DR. DOERFLINGER: Let me make a clarification which I did not think was necessary. We are not talking about who is a Catholic here. There is a long tradition in the Catholic church that not all positions, that is all I am talking about, are equally valid, authentically Catholic positions.

In particularly, cases where church teaching has explored an issue at great length and taken into account what it can of all scientific resources and taught rather solidly on an issue. That is not the same as just one theological opinion among others. I think

Father Wildes would agree with that as far as it goes.

That is what I am saying.

You can put five Catholics in a room, you get six opinions sometimes on some things. Usually that will not happen on something the church has thought as deeply about and as long about as this matter of the protection of life at its "conception."

But in any event, you know, if I leave you with one thought it would simply be that if Catholics can be found to disagree with my moral status, I can find atheist embryologists who would affirm everything I have said about embryology.

DR. CHILDRESS: Thank you.

Is there anyone else who would like to offer public testimony? We had only these two names register with Pat Norris.

Okay. Thank you.

We now have some time for further deliberation among the commissioners about -- and I am not sure there will be any but please -- the panelists

are free to stay, too -- whether there is anything else we need to discuss. We have had certainly a very rich set of presentations and illuminating discussion today.

Eric?

DR. CASSELL: Well, I want to say that I have come away from this, as I briefly noted earlier, with an appreciation for a number of issues that have come up today and they have actually come up before but sort of peripheral and I now think they ought to be more central.

One of them, which is sort of interesting to me, is that research progress -- everybody seems to agree that research progress is a good in itself. Nobody is willing to say, "Well, death is with us all the time and it is about time now to accept it and that is the way it goes." That is not where we are and we are -- we continue to be a nation and a culture in favor of moving forward and this is where moving forward takes place now. It seems to have a legitimate base.

There is also, I think, a very uniform view that it requires -- whatever we come out with requires

the respect of the humanity of the embryo. Whatever is happening, we are talking about a human issue. We are talking about a human issue on the outcome of the research and we are talking about a human issue in the course of it and the process of it. And I think that that is an important thing that we do because there is no question about it that when people do science, just like when physicians are practicing, they tend to lose sight of the fact that this is a human being or that this is a human product of something that is going on.

There was a considerable belief that there must be a socially just -- I mean, uniform belief that a socially just use and distribution should come out of this research and that problem is raised by the issue of for profit participation in the whole thing. And, also, that it ought to lead to healing and curing and not merely enhancement or not merely shining up the human condition.

And then we get, of course, something which I think is becoming increasingly clear that -- and that was

made even clearer by the forcefulness of the most recent presentation that the status of the earliest embryos is morally ambiguous. You never have to hit the table with a hammer unless the table is moving and so -- that is extremely important to us in this because we are trying to find a way in which something can move forward without us having to fight. That is one of the things that in the past has marked areas like this as a fight, as a social fight. If we can resolve this without a social fight, I do not mean without disagreement, there is always going to be disagreement, that would be very useful.

There is also uniform belief that we have to continue looking for alternative sources, which you never have to worry about that. You know, there are grants for just that kind of thing and there are big awards on the other side that keep moving people towards that.

And the thing that has come up in the past again and again and again, which is the need for education and public discussion of this issue once again.

Science policy is public policy and science policy requires education.

And then, finally, I increasingly hear a reason -- or a discomfort about the science itself. It might require some kind of oversight similar again to the British -- the way the Brits are doing their's. We have not actually considered that for ourselves up to now but it is beginning to sound to me like we are going to have to do that. That might not resolve Gil's discomforts but it might, you know, keep the house properly constructed.

And then there is another way always. I am Jewish, also, and it is, I guess, an inborn worry about eugenics. It always makes Jews very uncomfortable. And so -- and I think we are able to talk about all of these issues as -- rather than coming down this very narrow line.

DR. CHILDRESS: Thank you, Eric.

Any other comments by commissioners or panelists?

Ron?

DR. COLE-TURNER: I think the issue of complicity really is going to be an important issue for you to think about in the commission. And we did not really reflect on it, I do not think adequately here today. It was very forcefully stated, I think, by Dr. Pellegrino, and I think with a helpful illumination by Dr. Demopolos, in Protestant traditions we tend to worry less about complicity because, I guess, we -- perhaps we have a higher tolerance for the intrinsic moral ambiguity of just being a human being and doing anything. Every human act is a mixture of good intent and bad intent, good result and bad result. And so we perhaps have a different way of approaching it.

But as I was thinking through particularly Ed's suggestion of complicity being thought of as using stolen goods, I began to think, well, suppose you as a physician observed me as someone who is dying of an infectious disease and you have here in the room stolen antibiotics. I do not doubt for a moment that you would

use those stolen antibiotics to treat a dying patient. I somehow do not doubt that.

But it seems to me that what you might be more worried about than using stolen goods is suppose not only I but hundreds, thousands, tens of thousands, even millions of people were treated by stolen goods. Would we suddenly have a vested interest in changing the laws on theft? If millions of people were treated by stem cells that resulted either from abortion or from the destruction of embryos, would they have a vested interest in shifting ground perhaps on that position?

I think that is a very deep concern and I obviously do not share the underlying assumption from which that concern would arise but if I did share that assumption rather that would be my underlying worry that the use of the benefits will shift one's moral position.

I suppose what I would like to urge the commission to do is to find the least complicitous way in which this technology could be used. That is poorly stated. The way in which this technology could be used

that results in the least concern for complicitousness. The more steps in between perhaps would be better than a tighter linkage.

DR. CHILDRESS: Thank you.

Any response?

DR. PELLEGRINO: There is a question on the complicity idea. The notion of distance, a moral distance, without getting into the dirty hands notion of philosophy today. It is a very, very interesting one. As you say, none of us can live in this world without being associated with some activity at some move which we may or may not think is right. And the question is how to discern in that whether it comes close enough to it to have dirty hands. So I think your point is well taken. We can go back on that.

You present a very interesting case which I will not take time on but I would just simply say that at least as I see the moral event you have got several things to think about here. Intent, the act, the circumstances and the end. It is the calculus between

those four that leads you to the question of right and wrong. So without going into detail I will approach it that way.

DR. CHILDRESS: Thank you.

Any other comments?

Yes, LeRoy?

DR. WALTERS: Should I come --

DR. CHILDRESS: Please do. Come to the table.

DR. WALTERS: I do not really fit into any category well today. I have been a consultant to the National Bioethics Advisory Commission on this topic so I guess it is primarily in that capacity that I would like to raise a question.

I would particularly like to hear from those who have serious questions about the morality of the research that leads to human embryonic stem cells comment on the question of regulating the private sector. So let's assume for a moment that federal funding is out of

the question and that human embryo research or research with fetal tissue is legally permissible in some states.

On balance if this work is going to go on in the private sector, on balance would it better to have a public review body that by law reviewed all private sector research and made public review and public discussion of such research a matter of the public record or would it on balance be a bad thing because it would seem to legitimate research that one regards as immoral research?

DR. PELLEGRINO: I will respond to that very quickly but I would say that as long as you made clear at the very, very outset -- not you but if I were involved -- make clear at the very outset that you do not accept this as a morally defensible way of doing things then, I think, in the interest of a social good argument I certainly would want to do what you say. It ought to at least be looked at.

Now that argument is, of course, to legitimize euthanasia and overlooks again the first

question; is euthanasia right or wrong. But I think it is a process that is going to go on and I think the private sector ought not to be free to do anything it wants to do. That is rather inconsistent it seems to me.

DR. CHILDRESS: But I guess a follow-up question, if I might, would be could some -- do you feel from the complicity standpoint, though, that someone with, let's say, your position could actually take part in that process without unacceptable --

DR. PELLEGRINO: Yes. Well, I would not take part in it but I mean there are others whose conscience would be different in the matter who could take part in that. Purely on the point of view of the social importance of what is going on, it is better to have it known publicly since I think we have all agreed here that this is a public decision to be made in the public realm.

DR. CHILDRESS: Which, after all, would involve taxpayer's money and so forth.

DR. PELLEGRINO: Well, again, as I say, I do not want to give a lecture on complicity but, I mean, I

would consider those four elements first, Jim, without going into detail here now. I would be happy to write it down if you want.

DR. CHILDRESS: Kevin and then Gil.

DR. WILDES: I was just thinking Jesuitically, of course, that there -- depending on how you put the structures together, I mean because it seems to me that you would want to have voices that had differing opinions involved in any kind of -- and I do share what started, LeRoy, as this concern that if you let all this go to the private sector with no oversight at all it will become simply a matter of the marketplace. But I was thinking of some classic cases and I will not bore you with that where I think if you -- much would depend on what you were asking the group to do and where it was in the process.

DR. CHILDRESS: Actually, it would be helpful if you would not mind writing up something --

DR. PELLEGRINO: Yes.

DR. CHILDRESS: -- you know, put paragraphs.

DR. PELLEGRINO: I would do it, Jim, if you would do me one. I posed the question.

DR. CHILDRESS: Okay. Well, I will say the version of LeRoy's question with the issue of complicity for society in terms of funding such a mechanism and --

DR. PELLEGRINO: It is a good and interesting question.

DR. CHILDRESS: All right. Gil, and then Larry.

DR. MEILANDER: I just want to be clear first. Was the hypothesis of the question that it is simply not going to happen, that the society would regulate -- would prohibit the private sector from doing the research and the only question is whether we should have public oversight on it? Was that your hypothesis?

DR. WALTERS: Well, I started from the premise that in most states human embryo research is not currently banned legally. Now it is true that the laws could change and it could be banned and it may be that if one thinks that such research is immoral one would work for legislation that would ban the research.

But, I guess, I am starting with the premise that there are some states at least in which human embryo research is legal and that private sector companies are, in fact, doing human embryo research in those states at the present time but so far as I could see without any national public oversight there are in some cases ethics -- ethics advisory boards that are commissioned by the private sector entities.

DR. MEILANDER: Then the first choice would be to work to make it illegal, okay. But having -- just sort of having said that, well, yes, of course, I think oversight would be better than no oversight as long as we mean by oversight what I would call something that is morally serious and I know precisely what I mean by that, that it would not be a requirement of the oversight board that it reach consensus but that it, you know -- in other words, I will lose vote after vote, you know, that is the story of life, but --

(Laughter.)

DR. MEILANDER: -- but you should not be coerced into reaching consensus, nor should an oversight board be composed only of people whom we know in advance have reached consensus. That is not morally serious.

DR. PELLEGRINO: That is a growing trend.

DR. MEILANDER: I understand that, yes. But as long as that is not built into the notion of oversight, why, amen.

DR. FARLEY: Could I just piggyback that with just one sentence? The stipulation that it would not have to reach consensus would be important, it seems to me, because it would prevent a kind of nonmoral and serious politicization of the process.

DR. CHILDRESS: Larry?

DR. MIIKE: May I assume that it is also unanimous that if public funding goes forward that oversight of the private sector must take place?

DR. PELLEGRINO: It would be totally inconsistent to do it any other way.

DR. CHILDRESS: Any other issues?

Eric, anything you need to say?

DR. MESLIN: The only thing I will say besides thanking everyone if you are starting to wrap up is we are going to ask all of the presenters to make available to us your materials. You will have a chance to write them up again obviously if you have got changes. But if you could do it in electronic form, preferably in WORD, I hate to be so specific, because it is our intention, this is now part of a public record, this is a federal advisory committee meeting and your words are now transcribed, and we would like to make your remarks available both on our web site at the appropriate time and perhaps in a volume of papers that will accompany this report.

So if in the next little while, not including the homework that Dr. Pellegrino and Dr. Wildes have been given, you could provide us with that, we would appreciate it.

DR. FARLEY: Is rich (sic) text okay if you do not use WORD?

DR. MESLIN: You can put it in WordPerfect --

(Simultaneous discussion.)

DR. MESLIN: Do not do it on a Mac.

(Simultaneous discussion.)

DR. CHILDRESS: Not only because this is the kind of meeting it is but I understand now, also, because of the quality of what we have heard. And this has really been, at least from our standpoint as commissioners, just remarkably rich and we appreciate all the effort you have put into it on such short notice.

Now we will let everyone return to his or her real job.

(Whereupon, the proceedings were concluded at 2:29 p.m.)

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